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THE JOURNAL ABOUT IDEAS AND ALTERNATIVE EDUCATION

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WHO DARES CHANGE A CURRICULUM?

THE XSEED STORY
Rejuvenating Classrooms

AMOLE GUPTA
On Nurturing
'Taare Zameen Par'

SPACES
Dynamic Playgrounds

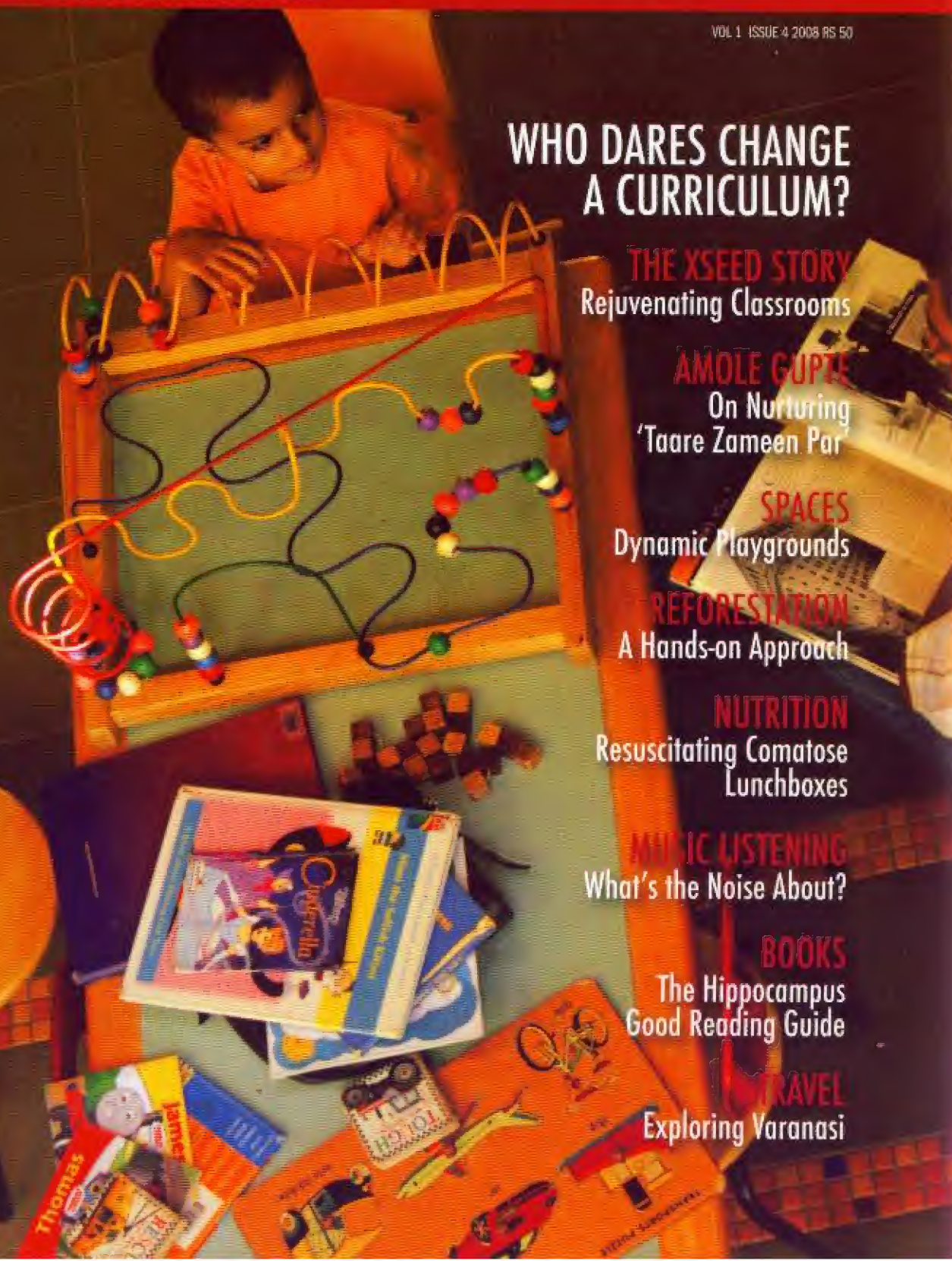
REFORESTATION
A Hands-on Approach

NUTRITION
Resuscitating Comatose
Lunchboxes

MUSIC LISTENING
What's the Noise About?

BOOKS
The Hippocampus
Good Reading Guide

TRAVEL
Exploring Varanasi





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EDITORS' NOTE



There are many things that go into changing the face of education. Change in policy and infrastructure, change in curriculum and delivery, change in physical environments, change in the attitudes of teacher and parents - to name a few. This issue is Curriculum Issue - from Steven Levy's ideas on creating a relevant, dynamic curriculum to the Xseed team's herculean efforts towards doing just that.

There are some other coups too - Amole Gupte, the man behind the pathbreaking Hindi film *Taare Zameen Par* tells us his side of the story; Architect Martand Khosla's playground project shows us how a playground may be as dynamic as the games that unfold upon it. Two other exciting new features in Mindfields - our collaboration with Hippocampus for the *Good Reading Guide*, and a segment where teachers may share best teaching practices.

We're enjoying every minute of this journey.

Do keep the feedback coming.

Amruta Patil,
Luke Haokip

New Delhi

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MAILBOX

DECISION-MAKING IN KIDS

I am a mother of two kids, and work in a school in Allahabad as Computer Teacher. This is the first time I came across your quarterly journal 'Mindfields' and I was delighted to know that somebody in India dares to find fault (AND also suggests remedies) in our education system.

Shweta Anand's 'Punished by Rewards' (Mindfields Issue 1) was excellent. As parents, we try to find the easiest way to get our children to do something. I wanted to ask if 'Cultivating decision making in your child' is a theme you could cover in Mindfields.

Divya Goswamy
Allahabad

HAPPY TO HELP

Just got 'Mindfields' (2nd Quarter 2007). Very nice, like the first issue! Will be happy to help this effort in any way!

Sridhar Rajagopalan
Education Initiative

WHERE DOES THE FRISBEE GO?

'Nesting Tales' had a good amount of info packed into a small space. I found the 'Make your own Bird Feeder' a little inadequate in terms of explanation (Where does the Frisbee go? Does one have to stick it to the bottom of the tennis ball container or does it have to rest on a small platform/pole?) A

close-up of the Bird feeder (like the one you've put), supported by a view from the distance would make for more clarity for an uninitiated person.

S. R
Pune

MINDFIELDS ON METRO NATION

Congratulations, for one year of Mindfields; and for being featured on NDTV's Metro Nation (Friday, 7th December 2007)! Good to see that such a small team has managed to keep up the steam - most DIY efforts run out of impetus early. Here's wishing you all the best in getting together quality material from good writers. For some reason, it never occurred to me that the people behind Mindfields are so young!

Ramneet Singh
by email

DELHI BY METRO

I loved the idea behind 'Delhi by Metro'. One thing though, the pictures in the article should have been larger so that they could have been relished. Also, I got bored plotting locations on the route mentally towards the end. A detailed map would have been a definite plus!

Gayatri Mukherjee
by email

KUDOS KAUSHIK RAMU, GOURI DANGE

Kaushik Ramu's piece on poetry gets my vote. His writing is informative, entertaining and

intriguing. Gouri Dange's piece (How to Write and Why Bother) was cool too. Suggestion - do not overlay body copy on full-page photos. The red band and text on Mindfields 3's cover was troublesome to the eye.

R.C.
Mumbai

BOOK ON ALTERNATIVE SCHOOLING

I wanted to draw your attention to this newly published title, 'Alternative Schooling in India' (SAGE Publications). This book brings into focus the innovative methods of learning in many Indian schools. It sheds light on schools that make the learning process fun for the teacher as well as the taught, in contrast to the whirl of exam-oriented learning in mainstream schools.

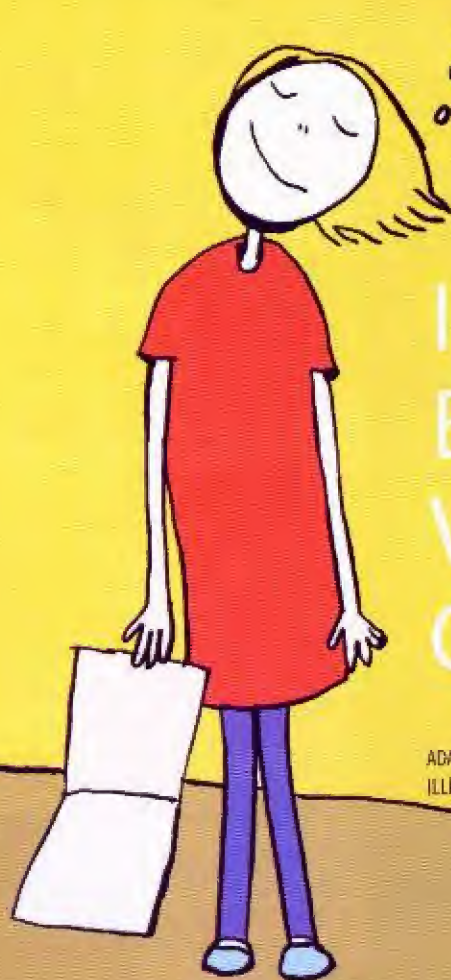
Aarti David
New Delhi

FOCUS ON SPECIAL NEEDS?

Thanks for the magazine 'Mindfields.' Very impressive. Found it interesting and useful. I was wondering if you all work with special educational needs. There is very little awareness about special needs...

Malini Sen
Education Times

DO YOU HAVE CRITIQUE TO OFFER US? OR A STORY IDEA OR EXPERIENCE YOU'D LIKE TO SHARE? WE'D LOVE TO HEAR FROM YOU. MAIL US AT: EDITOR@MINDFIELDS.IN
SELECTED LETTERS WILL BE PUBLISHED IN THE NEXT ISSUE OF MINDFIELDS.



IN THE BEGINNING WAS THE QUESTION...

ADAPTED FROM STEVEN LEVY'S BOOK 'STARTING FROM SCRATCH'
ILLUSTRATIONS: AMRUTA PATIL

Education-related literature is saturated with ideas on educational reform, while our children remain starved for authentic learning that grows out of their unique, original classroom experiences. In 'Starting from Scratch', award winning teacher from Massachusetts, Steven Levy presents an inspired alternative.

The book offers a creative reconciliation of some of the more hotly debated issues in education: project based learning versus basic skills; integrated curriculum versus discipline centered instruction; state and national standards versus local and individual interests.

In detailed accounts, *Starting from Scratch* explains the step-by-step observations, thinking, and planning that enabled Levy to develop a variety of original projects with his elementary students. While these projects were generated by the children's own interests, they also provided myriad opportunities for basic skills development. Instead of recapitulating fundamental arguments, *Starting from Scratch* simply shows successful illustrations of how "the best of both worlds" can coexist in an engaged classroom. This article encapsulates some of Levy's ideas.

DELIGHT IN THE CHILDREN

"While I do not always recognize the genius in every child, I sometimes have an insight that penetrates beneath visible behaviour and reveals who a certain child really is. When I do, I see a quite different child than the one who is constantly acting out in class."

Someone once said that children need one thing in order to succeed in life: someone who is crazy about them. Before we can teach children, we need to delight in them. We need to find a way to delight in all our students. Too often, classrooms are designed for children who are at home with abstractions of linguistic and logical mathematical thinking, leaving many others to feel that school is not for them.

Students who learn or express in more concrete or imaginative ways struggle with the abstract thinking required and fall further and further behind. Eventually they lose hope and either distract the class or retract from it. Not only do the individual students suffer, but the class community loses the valuable contributions they might make.

I try to have as many kinds of activity as possible going on in my classroom. I fill it with music, art, poetry, drama, sports, and crafts, along with the usual academic subjects. I regard them all as equally impor-

tant and involve all the children in all of them, often as a whole class. This way I am able to find some way in which each child can excel, some activity in which each can shine.

I do not let children do whatever they want, working only in areas in which they are talented. In fact, I think the times I do them the most good are when I help them go against their grain, do work that does not come easily. When children are recognized for their strengths, they are more willing to expose their weaknesses.

TO EACH TEACHER, HER OWN GENIUS

"What I want from my system is a very broad sketch of subjects to teach and freedom to teach them out of my own design. Then let me have room to explore the topic with the children!"

Just as every child has a genius, so does every teacher. Each one of us must teach out of his or her own genius. The curriculum in every classroom should be shaped by each teacher's unique gifts, training, and interests. Our natural authority in the classroom is based on our authorship of the activities and experiences we use to engage the children.

For a teacher to create a sparkling learning environment, it is important to wrestle these questions – What is important to teach? How will the children learn? Though curriculum and content might be determined by the state framework, we can often choose the materials and methods of instruction.

ASKING THE RIGHT QUESTIONS

At the heart of teaching lies the asking of right questions. Asking questions promotes an interest in the 'Other', acting as a balance to the self-absorption and self-centredness that pervades our culture today.

A good question is broad enough that all children will have an entry point. Good questions provoke a diversity of responses – they have no one right answer. Questions that elicit seemingly conflicting observations and perspectives challenges students to think in creative and imaginative ways.

It is questions that lead into authentic curriculum, and they rise from an array of different circumstances. There are the grand, essential enquiries about broad and deep themes. There are, too, the questions that emerge from everyday things, find the extraordinary in the ordinary – where does bread come from, where do our clothes come from? Some questions arise out of the process of studying required curriculum – where does our town get its name?

A TEACHER'S ROLE WITH QUESTIONS

- Give students time to reflect, allow time for the question to ripen and deepen
- Avoid the quick response, it discourages students from speaking the first thing that comes to their mind
- Lets students speak about the question from multiple perspectives, it encourages divergent thinking, while at the same point
- Appreciate thoughtful responses. Follow up with questions that explore the ramifications of a particular idea or point of view.
- Challenge students to explore relationships between different thoughts, and take into account others' data and observations
- Keep everyone involved, actively pursue the ones who tend not to participate, and challenge the superficial to dig deeper
- Focus not on the 'Right or Wrong' label, but the thinking behind the response
- Celebrate the question itself. Stop to laud a particularly insightful or profound question. Even if no one manages to answer the question, we are all the more thoughtful for having heard it.

WHAT IMPAIRS CURRICULUM

"Curriculum is most authentic when it arises out of the natural activity of people coming together. When people come together, they observe, question, compare experiences. This is the raw stuff from which learning begins!"

1) Fragmentation of Subject Matter

Compartmentalised learning does not help, because it does not correspond to the way human beings experience life. Presenting the world broken up into subjects puts it into a form already abstracted and shaped – predigested almost.

2) The Abstraction of Subject Matter

Concepts begin to become meaningful when they are connected directly to experience. When we teach the symbol without showing the child how it evolved from the concrete experience, we run the risk that he will get the name, but not the concept, the form but not the understanding, the information but not the A-ha!

3) Reliance on prepared textbooks and learning kits

But if we don't organize our lessons around prepared materials, where will they come from? One of the most valuable things we do is give our children the confidence that there is a way to find the answers to the questions they have. We (must) show them how to track down the resources, how to collect data, how to experiment. In short, we (must) teach them the methods of inquiry employed by the scientist or historian. We (must) show them how to interact with the world in a thoughtful way.

4) The Expectation that we will 'cover' vast areas of content

A major gap exists between covering a subject and understanding it. Coverage implies an overview of facts. Children are responsible for learning the content and are tested to see how much they remember. There isn't any time to develop the habits and skills so important in creating thoughtful and responsible independent thinkers and learners.

PROCESS OF DESIGNING AUTHENTIC CURRICULUM...

"Good projects do not just 'happen'. They grow out of very fundamental principles concerning children, teachers and curriculum."

1) Topic

It is important for me to have a strong understanding of the content, and yet have enough room to explore and learn. The topic needs to have genius – uniqueness, versatility to open out an array of avenues to explore.

2) Illustrations and Experiences

For a mathematical concept, like telling time, one might try to discover its origin: "What do you think was the first time anyone needed to know the

HOW ONE CLASS PUT TOGETHER ITS OWN CURRICULUM...

At a three-day workshop that Levy and a colleague attended, they were asked to design the ideal classroom. They presented the image of an empty room – and described the skills that would be needed to plan, fund, and build a learning environment. Behind the empty classroom was a desire to involve the children in the planning that adults normally do for them.

In *Starting From Scratch*, we get an heartwarming insight into how the quest for the ideal classroom started in an unfurnished room with a group of fourth graders. Along the way, they learn to build desks (and figure out the measurement and math behind it), hold a bake sale to finance the project (and the economics of earning, spending and saving), and have scores of other spontaneous, but carefully navigated discoveries...



time?" Also, examples in the children's experiences that parallel (on a small scale) the principles you are trying to teach them about the world.

3) Questions

Think of questions that will draw out the students' experiences and lead into more questions. "If you were to disappear today from your life, how might I find something about your life?" would prompt children to think about the kinds of records and artifacts that are evidence of their existence.

4) Story

Children pay attention to a story – try to figure out a way to put the content you want them to master into a story. Let the story have a beginning, middle, and end. Let there be dramatic tension between protagonist and antagonist. (In the Story of a Plant, for example, there is the growth from seed to plant, the sacrifice of lower leaves, the happily ever after of seeds falling to ground and becoming saplings again. There are many antagonists in this tale – heat, drought, overcrowding, pests, the gravity that pulls it down as it tries to reach towards the sun!)

5) Activities

These could range from designing questions, researching answers, collecting and analyzing data,

sharing learning with the community.

6) Skills and habits

Be clear what skills and habits you want to teach. (Include reading activities, for example, so they can discover the patterns of capitalization). It is vital to distinguish between fact and assumption – find repeated opportunities to let them tell the difference.

7) Evaluation

Try to informally evaluate student participation in class discussions. Evaluate their methods of research, data collection and evaluation, interviewing skills, etc. Ensure each child is doing more than she thought was possible. Collate all project work at the end of the session to keep a track of everything learned through the year. ♦

IS IT AN AUTHENTIC PROJECT?

- Does it arise spontaneously out of discussions?
- Is it original? Will it make the class (and you) feel like pioneers?
- Does it engage all the disciplines and multiple intelligences?
- Does it lead to primary resources? Original texts, artifacts, own data?
- Does it have meaning? Is it of interest to people in and outside school?

'There is No Room for Fear in a School'

In conversation with Sathish Jayarajan, Principal of Mallya Aditi International School, Bangalore.

TEXT AND ILLUSTRATION: AMRUTA PATIL
PHOTOS: MINDFIELDS, MALLYA ADITI INTERNATIONAL SCHOOL

AP: What is your background?

SJ: I've spent most of my life in Bangalore. My father was a research scientist at the Indian Institute of Astrophysics and my mother, a homemaker. I went to Clarence High School, St Joseph's College and then to Bangalore University. I spent a couple of years in McGill University (Montreal, Canada) for another Masters in Political Science – this should have led to a PhD... but did not...I think I was way too young for that. Maybe I should do it now.

AP: How did schools happen to you?

SJ: I was a teaching assistant at McGill. I really enjoyed that experience – and decided teaching is what I'd like to do. I always wanted to come back to India ...my dream was to get into one of these small colleges like St. Joseph's to teach – it seemed like a good life, and people were reasonably well paid. I even passed my UGC tests...but it didn't work out... there were no positions open in those days.

Then I heard about this school. This was before the email era, so I sent in an inland letter to Mrs. Anne Warrior, telling her about myself. She asked me to meet her, and give teaching a try for one month – it worked out. I started off teaching History and Economics to Grades 7, 8, 9 before moving on to Grades 11 and 12. From 1987 to now – it's been nearly twenty years!

I've not had such an extraordinary journey...I've not had a Road to Damascus like experience where I changed direction (*laughs*) I've been with this school all my working life.

AP: You transitioned from being teacher to principal in 2003. Has there been a character shift in the school since you became principal?

SJ: There has been a change of administrative style for sure. We have more or less decentralized the system – with strong leadership teams heading various sections. They are all practicing teachers.





I personally feel that unless you have been in the classroom, there are some aspects of being a principal that you cannot handle. You can handle the financial aspect and all that, but you need to understand what the teachers are doing in the classroom.

Choosing your best, most motivated teacher and making her the principal may not always work. Because the skills needed as a principal may be different from those you need as a classroom teacher.

Why I am happy to be the principal here is that it has not taken me away from any of the things I liked about working with a school – I still teach, for example. I am still in touch with students.

AP: What does your day look like?

SJ: I get in at about 7:45 AM on most days. After watching Al Gore's 'An Inconvenient Truth', I don't feel like using the car I am entitled too. So I use the bus as much as I can. It's a bus full of teachers – I chat with my colleagues on my way to school.

Since I don't have a secretary, I handle all my correspondence myself. At Mallya Aditi, everyone does everything. For example all our buses have teachers on duty – when there is the need, I have bus duty too. I don't carry too many things back home every day. No email at home, either – a conscious decision. I can be reached on my cell phone.

Most of my workday is spent having conversations with various people – starting the administrator who looks after all the logistics, bus issues, complaints from parents – the usual contingencies. Then the coordinators come in

for my input on something... could be a discipline issue, or an academic issue. I spend most of my day meeting various people, parents – some fix an appointment, others just drop in.

AP: How do you manage the open doors? In most places, there's a lot of hierarchy before you make it into a principal's cabin.

SJ: I don't know – I guess I must be neglecting the important matters (*laughs*). You will notice that a lot of kids come up to me – they are very welcome talk to me whenever – sometimes they just want to chat ... I feel this is very important. Reports and paper work can be dealt with later – my staff stays in school till about 4:30 or 5 PM, so a lot of office stuff happens after the children have left school. I've got a very good administrative team.

AP: What kind of transition have you seen in teachers and students over the years?

SJ: In this school, any authoritative stance is challenged – whether the person in question is a principal or a teacher. There is a certain awareness of rights – of what they can or cannot do. There is a willingness to articulate grievances and questions very candidly. Students ask me questions that I could never have dreamt of asking my school principal – although I actually liked him very much.



A SIGNIFICANT NUMBER OF STUDENTS AND TEACHERS ARE EMPOWERED BY A PRINCIPAL WHO IS ACCESSIBLE AND FRIENDLY – BUT THERE ARE SOME WHO WILL SEE YOU AS A 'WEAKER' PRINCIPAL, TRY TO TAKE YOU FOR A RIDE.

I don't see this accessibility and candour as a problem, others do. Teachers who have been teaching for 25-30 years see this as insubordination. I think it is cultural. A significant number of students and teachers are empowered by a principal who is accessible and friendly – but there are some who will see you as a 'weaker' principal, try to take you for a ride. But I don't think any rule or system should be focused on the 20% who do not comply – it should be focused on the 80% who do...

Fear has no place in school – in that respect I am with Krishnamurthy. That is a tricky thing to say aloud, 'fear has no place in schools' – because teachers like to be in control of things. Being in control is so convenient.

AP: What are the major issues you see yourself dealing with in the near future?



SJ: Major issue? Adolescent learning in middle school. Brain research is telling us that a lot of stuff that we are doing with adolescents, 12 to 18 year olds, may be fundamentally wrong. I used to think that 17-18 year olds were young adults – but apparently not. Apparently boys do not become adults till they are 25 and girls, until they are 21. It has to do with the fact that the frontal cortex (which determines the kind of choices that you make) doesn't develop fully until those ages.

A close friend, Kiran Sethi (of Riverside School, Ahmedabad) was saying the other day that we have to be the frontal cortex for the kids until they are ready. From time to time they are going to make bad judgments, they are going to act impulsively, they are not going to have much focus. Teaching that age group is a huge challenge and I am trying to figure out how to do it well.

AP: Is Mallya Aditi planning to open any new schools?

SJ: There have been offers to start schools in other cities, but we have no plans to set up more schools. I can see the importance of scaling up – you are able to reach more children – but given the way we work, I don't see how we are going to do it.

How good or bad a school is, is pretty much dependant on the team you have. This team has not gathered overnight – it has taken seven years to build. It will be very difficult for me to replicate it, and breaking up this team and sending part of it elsewhere will weaken this school. The departure of even one individual will cause a bit of wobble...

AP: Teacher attrition has become a huge problem with a lot of international schools vying to outdo each other's paycheque. How do you cope?

SJ: So far, the attrition rate has not been so high here. It is a very good work environment – there is a level of comfort is here... We have a core of people who have been here for 20 years plus, another that has been here for 10 years plus – and we also have a lot of very good new people who have joined us in the last 5 years. We have lost teachers primarily because they were moving to another city. We have lost only one teacher to another school.

But, yes, pay scales are becoming very seductive. One can't blame the teachers for thinking in terms of money. Rents in Yelahanka have hit the roof. Also, there are many more teachers who are single parents, or not part of a double income household. They are running a house, raising children on a teacher's salary...

AP: What are your personal plans for the future?

SJ: I'm currently in my second 3-year contract as Principal. It comes to an end in May 2009. I haven't actively thought of whether I am going to continue – it's both my decision and the school board's. I haven't been on a proper holiday in maybe ten or twelve years! (Not counting short breaks and conferences). The role of being an educator has taken a lot in terms of energy and commitment and time. I have actually not done much else in the last 20 years – though I feel very blessed at a personal level, my marriage has been a good one. We don't have kids – so the kids are doubly precious here.

AP: What do you read, what films do you watch? What are your current interests outside of school?

The job is fairly obsessive – it cuts into a lot of my life. Thoughts about school are constantly on my mind – it's very difficult to switch off. My reading list is closely related to what I teach. I teach grade 12, and there is much reading one needs to do for that. I am pretty avidly into quizzing and am part of a quiz group. I watch a lot of films, the things the kids are watching – so that I have something to talk to them about. I recently watched a Lindsay Lohan film, what's it called – 'Just My Luck'! (laughs). ♦



FEAR HAS NO PLACE IN SCHOOL – IN THAT RESPECT I AM WITH KRISHNAMURTHY...

...TEACHERS LIKE TO BE IN CONTROL OF THINGS. BEING IN CONTROL IS SO CONVENIENT.



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I have never let my schooling interfere with my education
Mark Twain

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You build the road, and the road builds you

Manzil is an unusual learning space, housed in an unlikely Khan Market apartment where Ravi Gulati lives with his mother and specially abled sister. The young people that think of Manzil as home have grown up in servant quarters around the area. They are the children of housemaids, cooks, electricians, barbers, drivers and domestic helps. Ravi Gulati shares the Manzil story.

TEXT: RAVI GULATI
PHOTOS: LUKE HADKIP

My elder sister has multiple handicaps. Because of her special needs, she went to one of the first integrated schools in Delhi – Balvantrai Mehta Vidya Bhawan – and my mother volunteered at the school for almost 20 years, followed by working for 10 years in Sahan Institute which works with even more severely challenged children.

In 1996, at the age of 62 and of 1.5 year long battle with cancer that we lost my father to, she wanted to open her own school for children with learning disabilities. The venue she chose was Kotla, a slum-like area in the heart of Delhi. She called the school 'Manzil'. After my father's demise, I decided to start an organic farm in some remote village in the hills. Life had other plans.



The local dhobi's son, Hemant, and his friend Pramod came to me for some help with their school maths. Hemant was in Grade 8, Pramod in Grade 7. I had some time on hand before I moved to the village, so I agreed. Ten minutes into our interaction, I realized that their understanding of numbers was totally sketchy. 2 - 5. Is it 3, -3, or can't be done. Ten minutes of imagining how numbers would look if the current decimal system of representation were to be replaced by the binary one, and to my amazement, I found an incredibly sharp comprehension of this utterly alien concept. There was something completely contradictory there. The children were clearly *bright and intelligent*, but somehow, they had been stunted by the way they were being taught at school.

Over the weeks that followed, Hemant asked me to include another friend into our Math session, then another, then yet another. Before I knew it, there was a head count of twenty children of different ages gathering in my living room. Irrespective of what grade they were in at school, they all lacked the same basic understanding of things had been learning for years. When I was explaining BODMAS (Brackets, Order, Division, Multiplication, Addition, Subtraction) for the 3rd time for the benefit of a newcomer, Hemant protested. He had already understood it well, and was hungry to move on. This was getting repetitive.

'In that case', I said to Hemant, 'I invite you to explain this to your friend.'

Hemant was confident of his learning, but hesitated to teach. Years of conditioning had taught him. A teacher was a 'position' and he wasn't in that position. As far as I was concerned, a teacher was a 'role-for-the-time-being', and Hemant was ready for it as far as BODMAS was concerned. Besides, I needed to carry everyone along in the class, and I wasn't ready to start a separate class.

After some persuasion and promises of back-up support, Hemant reluctantly agreed to try his hand at teaching. Unknowingly, we had laid the foundations of a crucial aspect of life at Manzil today.

At this point, it may be useful to examine two distinct goals of education that are frequently mixed up. The classical ideal of education is that it makes us better human beings, both within and in our *lok-vyavhar* (conduct in society), brings out our best potential, makes us active and constructive members of society, teaches us *jeene ki kala* in community etc. The other goal - a utilitarian one - is how it helps us earn personal wealth and status.

The parents of Hemant and Pramod and their friends were interested in education's utilitarian benefits. They did not even bother to pay lip-service to the classical ideal, and so in this way they are clearly more grounded in today's reality of what schooling actually pursues as opposed to what it likes to say it does. They were under the sway of the modern myth that schooling equals education. Having

observed that any schooling - good or bad - brings respect, status and better earnings; they put their children in the only schools affordable to them - those run or aided by the State.

To the utter bewilderment of these parents, the promise of jobs on which 'education' (schooling really) was sold to them, turns out to be hollow. Their children leave school, coveted certificate in hand, only find themselves unprepared with the skills, knowledge and attitudes that modern jobs

demand. Nobody taught them what they really needed to know. Nobody even told them what it was. We used to call them the educated unemployed. Some now call them the educated unemployable.

Interestingly, in their frustration, they often return to even higher studies. But all this does is drive a kind of 'education inflation' where people pursue progressively higher



and higher degrees in the hope of out-pursuing others, thereby seeking to thin the crowd of competitors for any given job. Few really acquire the skill-set needed to perform the available jobs through their education. If and when they do, it is through experience, often accidental.

My understanding of all this evolved over the years, parallel to the evolution of the work. The thought of the organic farm was left behind. It was clear that trigonometry was not going to serve my buddies in any way, except as a passport to Grade 11, where they were doubtlessly going to run as far away from Math as was possible. Yet a life awaited them, beyond school and college, for which they had dreams and aspirations. I realized that if there was one thing that would give them a real shot at what they wanted, it was the ability to converse confidently in English.

English. Funnily, as far as my information goes, it's spoken by a mere 5 % of people in India. Yet it is treated as our lingua franca. Not a sign on a shop in Khan Market is in any language other than English. Not a programme is announced at cultural hubs like India Habitat Center in a language other than English. Big business, higher education, higher judiciary – all completely monopolized by English. In spite of having learnt English as a subject for years in school, my children could not have a simple, meaningful, independent conversation in the language. If there was one thing that would not only dramatically improve their chances of landing good jobs, but also generally address the diffidence they felt in dealing with things outside their ordinary spheres of experience, it was learning spoken English. We started classes.

It was clear that we couldn't teach English the way it was taught in schools. Being creative is often about clearing out the vestiges of what already exists. We cleared out the books. They distracted both the teacher and the students



LEARNING STOP-MOTION ANIMATION



MURAL IN THE COURTYARD

from the real task of the learning the language. With no books and no syllabus, and an hour to talk freely about anything that caught our collective fancy, (the use of Hindi was disallowed), we managed to recreate the conditions in which every human being masters his or her first spoken language.

When I bought my first computer, it was the childrens' to master and use. When friends and relatives visited, they interacted with the children and shared their own knowledge. They all went away changed, their prejudices dented.

We grew in numbers of young people, and more importantly, in the richness and diversity of our experiences. Neither size of our learning spaces, or our coffers increased. As a matter of fact, there were no coffers. Rent and salaries are

usually the two major costs of running something like Manzil, and we were burdened with neither. Renting out the shop that my father used to run when he was alive, coupled with an old habit of keeping our personal expenses under control, allowed us to give all our time to Manzil, without having to draw any salaries.

When I traveled outside Delhi, I took the children with me. When I met interesting people, I invited them home to meet the children. When a child mentioned he wanted to be an Air Force pilot, I went searching for one he could talk to. Cause and effect interlocked. And that's how Manzil grew. ♦

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FIRST PERSON





An idea called HIPPOCAMPUS

Vimla and Umesh Malhotra have founded the Hippocampus Experience Centre in a sleepy Bangalore bylane. Umesh tells us about what it took to leave behind a cushy IT lifestyle and create 'more than just a library'.

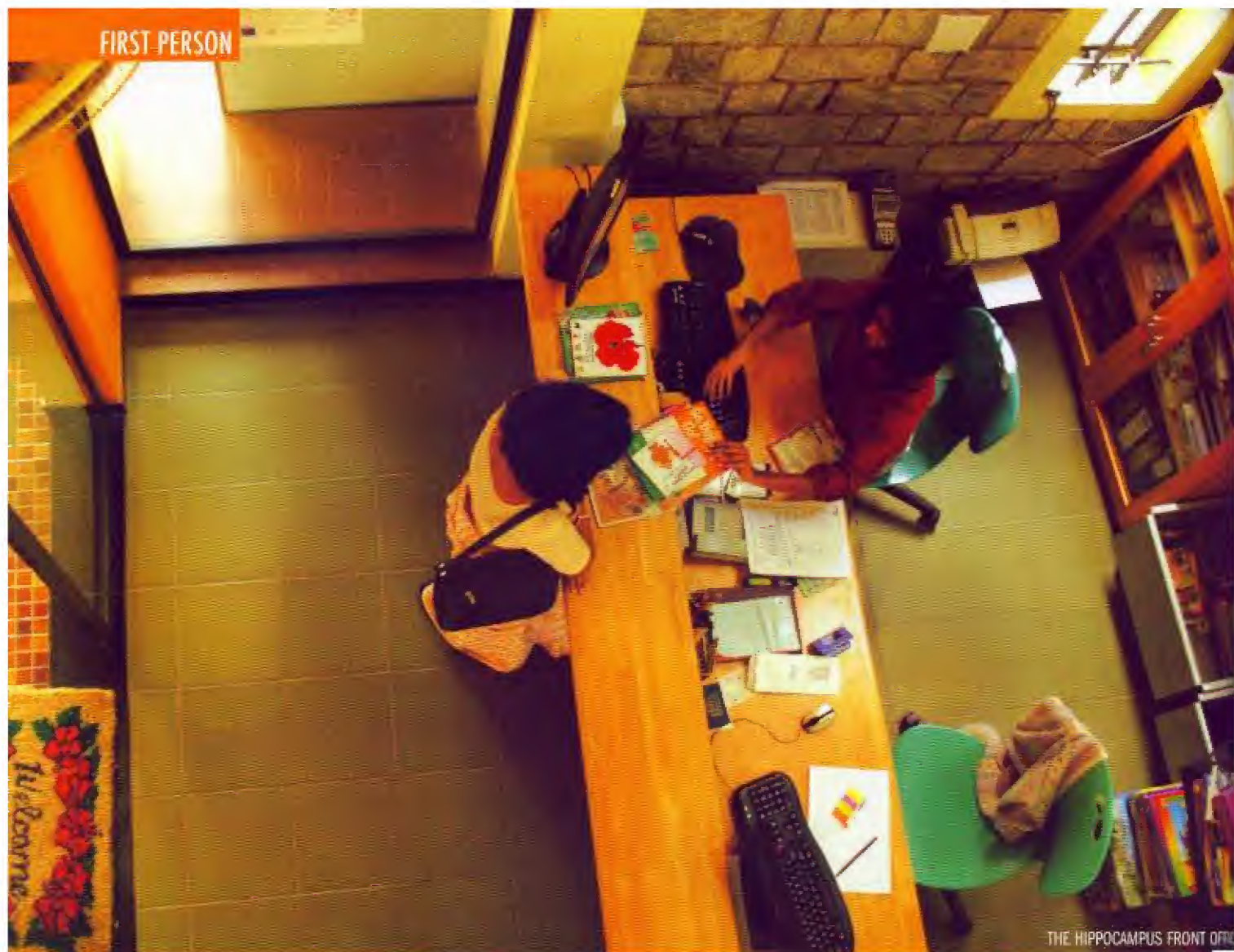
BASED ON AN INTERVIEW BY AMRUTA PATIL
PHOTOS: LUKE HOOKIP



The idea germinated eight or nine years ago when Vimla and I were in the USA. We visited the public libraries there quite often, and Vimla always wondered, 'Is it too much for us to have a public library of this calibre in India?' Why did people have to go to New York or Singapore to say "What a great

library"? There ought to be an inspiring library in our own backyard! It was one of those things, you say, *kareng ek din...*

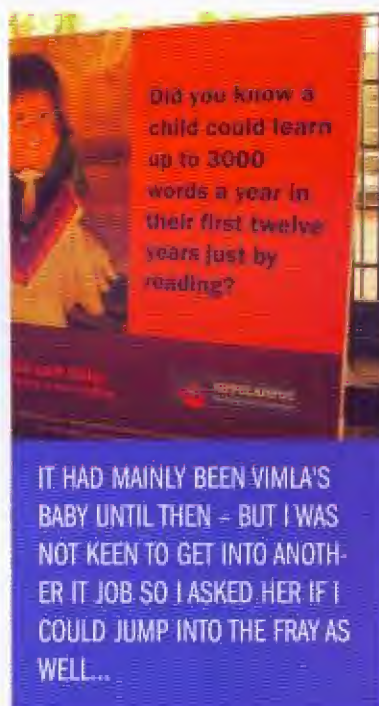
In 2002 I sold the company I had founded to someone from Singapore. We packed up, went to watch the 2002 Football World Cup in Japan and Korea.



THE HIPPOCAMPUS FRONT OFFICE

When we came back to India, we wondered what to do next. There was a piece of land we owned – and the library idea had never left us. It had mainly been Vimla's baby until then – but I was not keen to get into another IT job so I asked her if I could jump into the fray as well...

We gathered some people from our apartment complex – school kids, college goers – and created a blue print of what an ideal library should be. Many ideas came up – a club, activities, video conferencing. That was the starting point. We imported 2500 books, selected from a list of 10,000 best selling books. A friend who runs a supermarket chain helped us figure out how. So now there was a plan and Rs. 15 lakh worth of books!



The idea was launched in March 2003. We hosted a party that first week. A thousand people turned up, only twenty people registered for a membership! But after a few days, a trickle of people started signing up. By the end of May, two hundred and fifty people signed up. We were confident that this could work...

EXPERIENCE CENTRE, NOT LIBRARY

We always tell people that books are competing with very beautiful, seductive media like television and the internet. These are very engrossing, and a lot of money is being pumped in to ensure that they remain that way. Our competition is not other libraries, it is these new media. There is so much for a child to do these days, and you are telling him, 'Read'.



UMESH IN CONVERSATION



VIMLA TALKS TO A HIPPOCAMPUS REGULAR



HIPPOS FROM WELL-WISHERS GATHER ON THE WINDOW SILL



BEYOND BOOKS



QUIET READING SPACES

There had better be a very good reason for him to do that! There are many books here at Hippocampus Experience Centre, yes, but there are also avenues to explore other multimedia material in a constructive, educational, fun way. Which is why we do not just call it 'library'.

There is a constant effort to make things colorful and exciting here. From the physical space, down to the branding. A girl who worked at Saatchi designed the mascot and the first publicity material. The very name was a coup. Hippocampus is the part of the brain that is responsible for your first set of memories.

THE FUTURE OF HIPPOCAMPUS

We don't mind people coming to us for help (Hippocampus has been involved

The libraries are more than mere book lending places. They are centers of activity and for some children, the only place to develop useful skills.

THERE IS SO MUCH FOR A CHILD TO DO THESE DAYS, AND YOU ARE TELLING HIM, 'READ'. THERE HAD BETTER BE A VERY GOOD REASON FOR HIM TO DO THAT!

in setting up several libraries and learning centres in underprivileged schools and rural settings) but we do not want to get into the franchise game. Once you start going the 'Bigger, better, larger' way, you lose your identity, start putting up placards with mantras like 'customers come first'. We don't want to worry about giving people our brand and going around collecting royalty.

We are doing the things we want to do, the way we want to – no compromises – this the way we would like to make an impact. ♦

FOR MORE INFORMATION VISIT
[HTTP://WWW.THEHIPPOCAMPUS.COM](http://WWW.THEHIPPOCAMPUS.COM)

**SEE THE HIPPOCAMPUS RECOMMENDED
 READING ON PAGE 56**



What's THE noise about?

How do you get someone to feel what you feel, and love what you love about your favourite piece of Hindustani music? Here are some props that might help...

TEXT: GOURI DANGE
PHOTOS: LUKE HADKIP

Here you are, swayed, moved, completely awash in your favourite Hindustani music. There they are, wondering what touches you so. How does one 'transfer' the experience to them? After all, it isn't a transfer of knowledge or information that you or they are looking for. It should be *anything* but that.

Often we make the mistake, as listeners or as introducers of music, of getting caught up in the cognitive, the historical, structural or diagnostic point - everything but the real qualities of the music itself.

Many music-appreciation efforts have left listeners a little more confused than they were to begin with. Overloaded with encyclopedic information about the music: where it originated, when, who the stalwarts were, what its melodic structures are, and such.

This is thanks to a valiant effort to stream the subject through listeners' cognitive centres, in a bid to be structured and precise. But here's the thing about music, and I'm saying this at the risk of sounding corny, sentimental and non-scientific: music has the capacity to filter into our being – mind, body, soul – without the aid of any 'cognition' and 'identifiers' as such.

Avoiding the lecture/cognitive approach, and simply putting on pieces of music for people doesn't work too well either. Things tend to go somewhat like this: The uninitiated, potential listeners come with all good intent of trying to understand what is the big draw of this kind of music.

You play one of your favourite pieces for them. Before that you tell them something about the singer, and the *raga*, perhaps. Everyone settles down to listen. And then to your dismay, right in front of your ears, the piece of music that moves you so, starts sounding to you like it must to a new listener: a bewildering group of sounds, which at best sounds sweet but inaccessible, and at worst, plain weird.

Suddenly, it is as if the notes have fallen out of your head, or at least out of one of your ears. You can hear the familiar and well-loved with one ear, but the other ear is hearing it as your listening audience is hearing it. A polite fidget goes around the room. Your role as music-lover and music-interpreter is somehow not unspooling as it should.

So how then do we give someone an 'in' on any kind of music that they are unfamiliar with. The music you listen to and really trip on, say Hindustani classical, suppose you want to introduce it to someone who has never listened to or been exposed to that kind of music, or to a musically inclined child who you believe would ultimately enjoy it much – what's a good way to start the process?



ANUSHKA SHANKAR IN CONCERT, JAIPUR 2008

LEARNING WITH PROPS

One absorbing and tangential way is to introduce a piece of music to someone with the help of 'props', and without any other information prelude. The prop can be a physical object or an imagined setting.

The first prop is telling your audience about what images and sensations the piece of music conjures up for you. The second prop would be an actual physical prop – for instance, to demonstrate or kind of translate the limpid unchained notes, the playful tumbling child/puppy sense that I get from one composition that I really enjoy, I give the listener a prop of a big beany toy.

I want her to get the sense I have, of how the singer is playing with the notes and for me the mind-pictures/sense impressions that always come up with this piece is of playing with a cute puppy – in a way that is very safe but very adventurous.



THE PIECE OF MUSIC THAT MOVES YOU SO, STARTS SOUNDING TO YOU LIKE IT MUST TO A NEW LISTENER: A BEWILDERING GROUP OF SOUNDS, WHICH AT BEST SOUNDS SWEET BUT INACCESSIBLE, AND AT WORST, PLAIN WEIRD.

The creature is in your hands, you're tumbling it this way and that, it is taking risks too, climbing on your shoulders, your head, but secure that you won't let go or drop it. You hoist it up, high, then suddenly down, it wags its tail. You feel the wriggly weight against you. All this while the piece of music is playing in the room. This particular piece is Sanjeev Abhyankar's small *Madhyalaya Hamsadvani*.

Intriguingly, the words of the piece are about a lover's tiff, and their making up. But for me the image is always the one described above. Listeners don't have to 'agree' with my sense-impression; but what I provide them is a small hook into the piece.

For another piece, a *Dhrupad* (*Shankara*, sung by the Gundecha brothers), which has always held me in its thrall, I tried another kind of prop. I lit a pair of agarbattis; the listeners then watch the plumes of smoke, as they listen to the recording.

The music is much like that – mesmeric, rising slowly, the two voices intertwining, separating, coming together again; sometimes steady-sombre swirls, at times fast and dipping. Once the piece is over, people talk about what the piece did for them.

The ‘intended purpose’ of the piece – praise of Lord Shiva – and the structure and tonal quality of the dhrupad genre, etc can then be introduced, if anyone wants to know.

It isn’t necessary that we all have the same music listening experience but these props offer a good place to start listening to something alien. I once held a music listening session where nine people brought their favourite piece of music from any genre, along with some prop, to help others get eluded in to what it was that piece of music did for the person.

Props were as varied as the beany chimp, lit agarbattis, a femur bone (from an old doctor who listens to western classical music), standing with eyes closed looking at the sun, sitting in someone’s driver’s seat and ‘mental dancing’. It was illuminating to say the very least.

The word ‘anecdotal’ is used by some dismissively, for material that is not authentic or researched or documented, particularly in the field of music, I think it’s another great way to throw a sidelight on a piece of music, or a performer.

That Abdul Karim Khan pulled out his tanpura and began to rapidly teach *bandishein* to his disciples, when he felt his death was near – is a story makes the listening more interesting for me. Some of the myths and legends rampant about the violinist and composer Paganini are colourful – they may not be verifiable, but they certainly add to your listening experience!

There are so many stories about Hindi film music composing ‘moments’ – lyrics and music of now famous old songs coming serendipitously together, after the people involved spent weeks of struggling to get it right. There are hundreds of such charming anecdotes that demonstrate a musical personality, eccentricities of genius, an era, a way of being...

RAGAS IN POPULAR HINDI MUSIC

‘From the known to the unknown’ is the basic mantra of education.

We all listen to the Hindi songs and many of them are based on Hindustani classical music. If we associate the songs with the ragas they are based upon, we can easily remember and recognize the ragas and the melodies.

Raga Kafi	Jalte hai jiske liye
Raga Kirani	Yad na jaye beete dinonki
Raga Kedar	Hamko monki shakti dena
Raga Todi	Raina bitai jaye
Raga Durga	Payoji maine ram ratan dhan payo
Raga Des	Kabira jab hum paida huye
Raga Malkauns	Aadha hai chandrama
Raga Yaman	Jab-deep jale sana
Raga Shivanjani	Jeena yanhia marna yanhia
Raga Bhairavi	Mile sur mera tumhara

All these add to the mood of what you listen to or have people listen to.

Particularly with Hindustani Indian classical music, old Hindi film songs make a great ‘prop’ – many are raag based and provide a perfect foothold to further listening. You could get people to collect as many songs as they can of a particular *raga*, and listen, then moving on to *khayal* and *bandishein* in that particular *raga*.

For parents who want their kids to be exposed to more than just loud and popular music (though that’s fun too), it’s best to make the music you enjoy a part of the atmosphere in your home. Your own enjoyment (minus any appeals to kids to “listen to this, this is real music, etc”), is the best exposure that you can give them.

Don’t expect instant or even medium-term results. But be sure that good music of any kind that is played in your house with obvious enjoyment, will find its way into your children’s soul. ♦



GOURI DANGE

People-watches and writes in Pune and Mumbai. is currently cowering behind the first draft of a novel. her big fix is Indian classical music. plays the sitar, but only for herself and a handful of tolerant friends. In keeping with Puneri tradition, she has a rude message on her front door. It says – ‘The more people I meet, the more I like my dog.’



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EXCLUSIVE



THE XSEED STORY

Of the forty children in a school classroom, no two learn the same way. A team of professionals is working towards creating a curriculum that will bring out the genius in *each* child.

Tell me and I forget. Show me and I remember. Involve me and I understand - Chinese proverb

TEXT: HIMANSHU JOSHI
PHOTOS: LUKE HAKKIP, ANUSTUP NAYAK,
RADHIKA SURI

Thought leaders around the world - Sri Aurobindo, J. Krishnamurthy, Howard Gardener, Maria Montessori to name a few - have offered suggestions as to how education may be made personal and effective. A dedicated group of people in Gurgaon are developing a curriculum and training program that will create a culture that enables each child to learn better in a school. A culture of quality teaching and learning, where quality is a rule and not an exception.



AN AUDACIOUS IDEA

At every annual planning meeting, we'd look at our programs and ask ourselves, 'Will this only further our cause, or will it help us meet our objective?' With every passing year, we continued to build on this thought - sometimes taking fairly divergent routes. One thing that was clear was our intent: to create something that would impact education for a very large number of children.

It is an idea that draws a lot of flack - people argue that scale and education change don't go together. Whether we will be lauded or laughed at in the days to come - only time will tell. However this piece is about the living experience of a group of uncommon intent and ability. It is about our efforts over the last one year, to consolidate five years of work into something that can redefine what quality of education means and how children learn in a large number of schools.

Our work in the past had largely focused on teacher/educator training, and several school-related projects. The projects gave us an exciting opportunity to demonstrate models of our work, but were energy-intensive, and limited the impact we could make on a larger canvas. The training programs were emotionally-charged and well-received. Two questions came up, though. First, how much had changed from a child's perspective. And second, how much could we change in the course of our lifetime, and how could we ensure that the change outlived us?

As a group we looked at what made some of the movements, products and services that have made significant impact in their respective fields click. And the lesson here for us was to figure out what if a school does one thing to uplift the quality of the

teaching and learning process - what is that one thing which must be made fool proof.

If we are talking about a revolution in education, are we also paying due importance to improvement in teaching technology? *Are we often putting the cart before the horse?*

If it was just good meaningful work we were pursuing, we should have continued our training programs. But unleashing sustainable change required an initiative beyond training alone.

WHY THE TRAINING WAS NOT ENOUGH

While our training modules for teachers and school leaders helped change mindsets, the wow effect died down a few days after training. In the absence of anything else except a charged-up training program, and in the ensuing struggle between what should, and what exists, most of the teachers fell back to old habits, although still realizing the need for change. For iDiscoveri, it was clear, training albeit critical, was only one of the other pieces of the puzzle that had to fit together to complete the picture.

Plenty of soul-searching ensued. We met school leaders and teachers from over 50 schools to find out what they really missed. The need of the hour was daunting as it was clear: either a complete overhaul of the teacher as a human being; or an all-new, high quality teaching-learning in the classroom. The schools asked us for a solution that worked between 8.00 am to 1.00 pm. Also to be considered was the total time available with teachers, and the varying skill levels they were at after their B.Ed training. A commonly offered rationale was - 'these realities cannot be changed in the near future, so we should first fight the battle we can't afford to lose: the child's learning.'





THE BIRTH OF XSEED

The work we had done for previous initiatives and examination of the global experience gave us the direction we needed - curriculum tools. Tools that complemented teacher training and stayed on with the teacher after her training ended - going the last mile. Thus teacher training and complementing curriculum materials were two parts of the solution.

To ensure that the change lived on after we had stepped aside was to groom one person in the school who understood the nuts and bolts of it. This was the third part of the solution - an intensive training program for the school's academic head. And finally the last part was to ensure that students were given work that really stimulated their thinking and got them to learn by doing. Thus student work and assessment aligned to the teacher's curriculum materials was the last part of the solution.

The first part of the puzzle was taking on the curriculum beast. The magic and scope for innovation in classrooms lies in the curriculum. Some of the most progressive schools in India are focusing on this with varying degrees of success. Some take a syllabus forward by detailing it more. Some create worksheets for key topics.

To take the example of triangles, if I were to define syllabus, for class 5, I would say 'Children will learn types of triangles, the angle sum property, etc.' The curriculum will tell us how children will learn this.

A part of the team got down to developing the details of the curriculum for the Primary years. The National Curriculum

Framework (2005) was to be the backbone of these curriculum tools. However the group also looked at some international prescriptions so that what we developed met the requirements of Indian system and was truly world class. Until now exceptional teaching quality was the preserve of a few gifted teachers. Our aim was to empower any teacher to bring the NCF document alive in her classroom.

FINE TUNING THE SETTINGS

There were choices to be made at every step. Depth versus width of coverage, how much to provide ready made, and how much to leave open ended, how to mix pure experience to build understanding, skill time practice to build skills. A lot of time and energy went into deciding the guiding principles of the curriculum materials.

After this, we drew up a continuum of topics children learn in these areas. In addition to NCF guidelines, we looked at leading textbooks to map the topics children learn in primary school, grade by grade. Learning outcomes were detailed for each topic. The continuum of learning outcomes ensured that there was a vertical and horizontal integration in what children learn in different grades and across subjects.

The program was broken into 3 parts. Each of these programs focused on learning strategies best for children in the respective age groups:

Early Program

(For children upto 4-5 years of age)

In the Early program, for example, there were no subjects. The entire program was made up of themes. From a child's point of view, at this age, it made more sense to combine all subjects as a whole. The focus of the themes was exploration - what children typically do in this age group.

Junior Program

(for children upto 8 years of age)

In the junior program (Grades 1-3), the themes were complemented with skill time for Maths and English. We wanted the children to start building skills.

Middle Program

(for children over 8)

In the Middle program, we decided to get a child to build mastery by diving deeper



MOST PEOPLE USE THE WORDS 'CURRICULUM' AND 'SYLLABUS' INTERCHANGEABLY. TO US, SYLLABUS IS THE WHAT, AND CURRICULUM IS THE HOW.

into each subject. We decided to use a lot of project-based learning. This helped us develop a pattern to branch knowledge into subject streams gradually, aligned to child's development and understanding of the world. In this way, as classes progressed, subjects would form naturally and start replacing themes.

With a topics map, learning outcomes and a structure in place, the next stage was to devise learning plans that teachers would use (with ample room for adaptations, if desired) to get children to experience and realize them. The learning plans provided teachers a suggested plan with ways to introduce concepts, engage different learners, manage classroom, and also assess children's learning. The guiding principle of the plans was to first incite a child's natural curiosity to learn, build understanding by doing. The experiences were simulated in areas of different intelligences so that all children learnt.

Some choices were made. Between depth and width, we would choose the former. Between telling children what to learn, and how to learn, we would go with the latter. Between giving teacher the last mile and leaving a lot of ground for innovation, we would choose the former. And hope that they would build on after six months rather than leaving gaps in the beginning and hoping some or most will innovate the last mile, between a teachers creativity and a child is learning we will go with the latter, although they usually *mean the same* to most, and largely to us.

TEST DRIVING XSEED

With the energy being pumped into the effort, it was vital to ensure that the curriculum actually resulted in better teaching learning in the class. Organizing this research was not an easy task - we had to run the Xseed class alongside a control class to measure the difference, both in student learning and teaching. For



teaching quality, we put independent observers in respective classrooms with a carefully designed observation rubric to measure teaching quality on key parameters.

Measuring student learning was easier since we could do quantitative research. We went to two volunteer schools that were following a conventional method of teaching and learning. With the help of their teachers, we identified two topics, one each in Maths and Science that was going to be taught. In one section, teachers continued to teach their normal way, and in another section, we taught the same topic the Xseed way. The results were astounding:

1. Xseed helped build better learning and understanding.
2. The biggest beneficiaries were the 'lower' half of the class, children who typically *get left out*
3. In an Xseed classroom, there was greater hands on learning and collaboration amongst children- key skill required in workplaces of tomorrow.

The second group would focus on training, the traditional strength of iDiscoveri. The first round of training that we delivered was a download of all we knew. Which was good, but if it had to be done in hundreds of schools, it was not possible.

A teacher put it very aptly - 'For me the turning point was to see the trainer, another mortal like me, transacting this. When I saw how he was adapting this to the context of my children, deviating at places, but largely achieving his objective, I felt empowered. I realized what Xseed meant to me as a teacher - a friends who I could turn to for help, and not a guru, I had to follow verbatim.'



And here came the role of technology, possibly the first time in iDiscoveri. We planned a series of demo videos which would almost in a cookbook fashion demonstrate to any teacher, how to teach. To shoot the demo videos, we ran Xseed workshops with children. These workshops got us over 4200 minutes of footage. 100 minutes of instruction was distilled from this - to guide Xseed teachers, and help our trainers communicate the essence of Xseed.

The entire training program was broken into modules, with each module aimed at giving teacher a tangible tool she could use in the class.

MAKING IT SUSTAIN

A critical aspect of the training program was to ensure that the change was sustainable. At the end of the project, should one of us join the school and stay there, implementing Xseed? Over a year, should we groom a master trainer who could take the baton and bank on iDiscoveri when needed? These ideas lead to the birth of the Instructional Leaders program. The instructional leaders training would be organized at iDiscoveri centre in Gurgaon and would also be a meeting ground for all schools that implement Xseed. This would also serve as a platform to exchange notes and learn from peers.

The last part of the program was tying up the student work and assessment together. This emerged, when we went back to few schools midway through our development. The schools appreciated the value of teacher tools and training, but asked for more help on student work and assessment.

Since we were focusing on objective assessment, de-stressing the role of traditional examination system, they asked us what were we giving them instead. As a result, detailed student workbooks that had a compilation of work for children to do were added to the solution. These would also carry assessment tools that would help parents and children learn how a child was learning.

While the curriculum manuals were designed for teachers, the student workbooks were designed for children. We re looked at each worksheet from a child's perspective - and built parent communication into the workbooks to get them to appreciate what Xseed was trying to achieve. Each workbook would focus on a topic and close with measurement of child's learning. This would also guide teachers and parents on extension or corrective learning if required for the child.

SIDE EFFECTS AND SURPRISES

The biggest of all challenges was limited development timelines. To keep everyone on the same page, we developed a series of meetings. We also had to develop a vocabulary sheet so that we didn't forget what each meant. There was the 'P' Meeting for the members of project management, advocacy, research, curriculum and training heads. There was the 'C' meeting and then a 'C++' meeting and finally an 'Oceans Eleven' meeting. As the delivery dates get closer, we are planning to launch the 'D' meeting!

Along the way, we ventured into uncharted territories. We figured out what Desktop publishing meant, how difficult it was to find illustrators, how to format documents on MS Word and Page Maker, and just how much heartache went into making a book.

As with all serious deadline-related work, peoples' work-life balance took a hit for a while. A popular joke in iDiscoveri went like this - 'Everyone has a balanced work and personal life here. The only difference is that it's a spring balance rather than a pan balance.' People came up with innovative ways to manage commitments at home.

A colleague claims he'd pick fights with his wife on days he wanted to focus on his work undisturbed. At work too, different ways to beat the heat emerged. For Shiladitya, it was the good old cup



UNTIL NOW EXCEPTIONAL TEACHING QUALITY WAS THE PRESERVE OF A FEW GIFTED TEACHERS. OUR AIM WAS TO EMPOWER ANY TEACHER TO BRING THE NCF DOCUMENT ALIVE IN HER CLASSROOM.

BEHIND THE SCENES...



of chai, for Shikha, it was her bean bag, and for me it was the *Chak De! India* song. For the vast majority, it was the TT Table installed near our coffee making machine. Pooja plans to use table tennis in one of her lesson plans to teach arithmetic!

For an organization like iDiscoveri, a marathon effort like this has meant a lot. We have been on an accelerated learning curve. Starting with Ashish's international study trip, interns coming to share their stories, over 200 meetings with teachers and school heads, and then our experience of implementing live pilots.



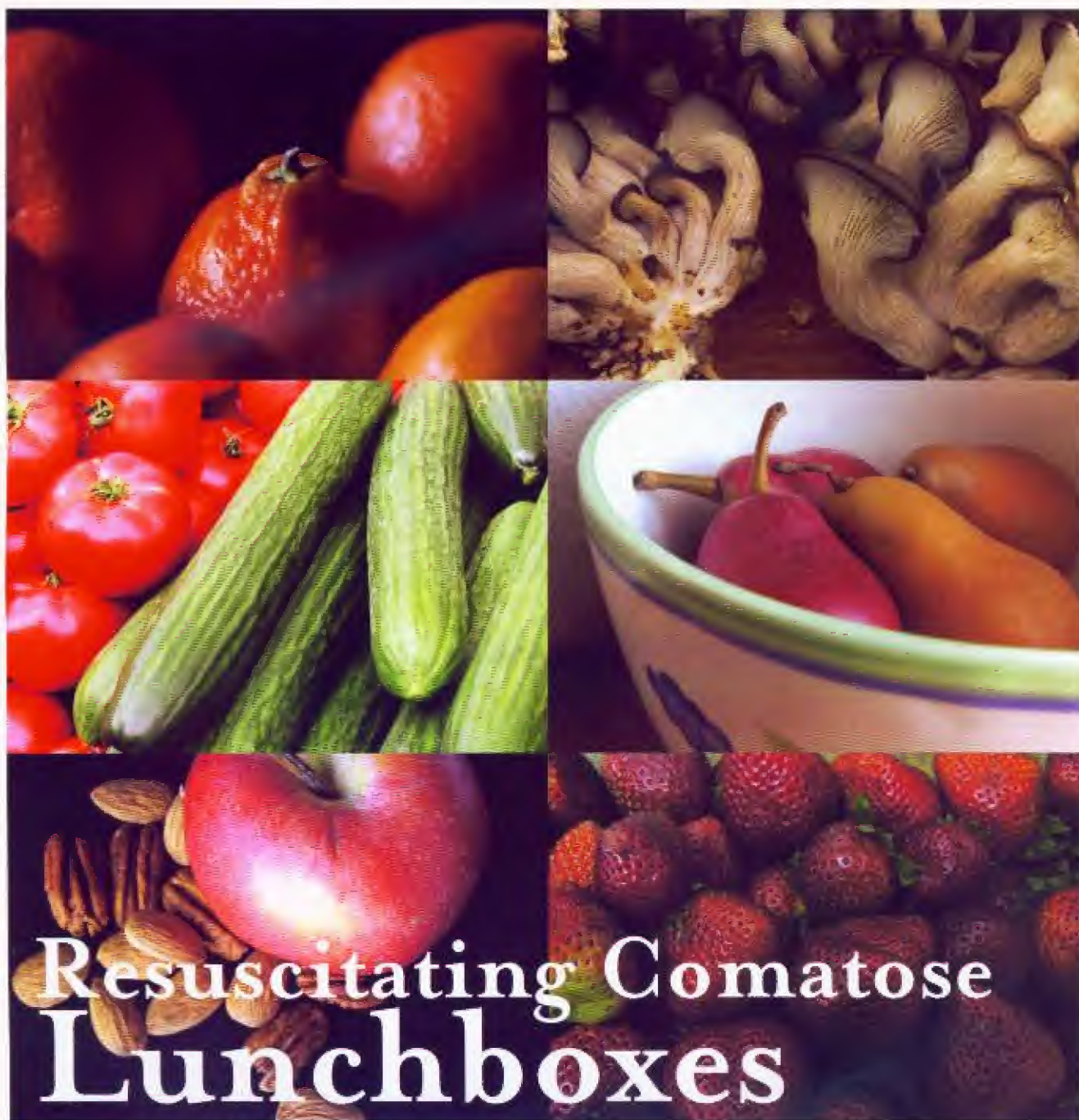
Personally, I have gained a deeper realization that there are two aspects of change - the human element, and the role of process. The human element is foremost, and so it will remain, till we remain a human society. Process, on the other hand, is what will make any change sustainable, independent of its creators.

The coming academic year will see Xseed getting implemented in a number of schools in India and some abroad. Right now, what matters is that we deliver the promise in a stellar fashion. Xseed next year may look a lot different than it does today, and the key to success will be to objectively ask the same questions we asked ourselves in the earliest days. The future is inherited by people who embrace change. ✦



HIMANSHU JOSHI

Has an MBA from IIM (A), and work ex that includes manufacturing health food and brand management. Is passionate about education and has the mountains in his blood. Is an unstoppable singer and prankster, and has bought himself a guitar which he hopes to learn to play.



Resuscitating Comatose Lunchboxes

Picky children are not born that way, they slide into a state of fussiness. Given time, anyone can learn to love broccoli and spinach...

TEXT AND PICTURES: LALITA VISVESWARAN

Flashback: I am 6 years old and I am hungry. By hunger, I mean that gnawing, gaping hunger that seems to want to dig deep empty holes inside my gut. It is past noon and it's time to eat. My well-trained stomach acids ooze out from the inside of my stomach walls at the appointed hour, looking for food to break down and digest. When the deed is done, they will retire. But they know when to return. Finally, the bell trills, sharp, long and welcome. I run out into the thatched shed right in the middle of the school yard - assembly hall in the mornings, lunch hall in the afternoons. Grandparents, maids, servants, sisters, mothers, hired hands - each holding a woven basket or two. I

search for my grandfather and my three cousins join me from the labyrinth that is our school building.

He sets down the lunch baskets. Mine was red, inside was a three tiered stainless steel lunch box, a spoon rolled into a clean, but worn out cloth napkin and a bottle of water. Today, there was a tiny little yellow banana tucked between the tiffin box and the water bottle. When I open the box, I try to catch the wafting aromas of freshly cooked food.

Grandmother had made rasam sadham, plaintain curry and the third tier of the tiffin box was a regular, curd rice with a tiny crater in the middle filled with the reddish bloody, chilli and spice slathered mango pieces, ironically known as tender mango pickle. My grandfather slyly heaps a spoonful of plaintain curry in the middle of my rasam sadam when I am not looking. One serving of vegetables, accomplished! The banana completed the second serving of fruit. Three more to go, but there is still half a day left.

Fridays means payasam. Mondays, we get an extra snack of two thin rounds of Marie biscuits to forget the trauma of attending school after two whole days off. Usually, fruit or sweet accompany the freshly made food. I didn't realize then how lucky I was to experience good food and reliably so. It was something we took for granted, like blue skies and good health. It wasn't until years later that I realized (like a lot of us do) that all the good things in life that we take for granted took effort, time and lots of love to be delivered.

REMEMBERING LUNCHBOXES

Several months ago, I tried to find out how the world ate. I asked my friends about their school lunch memories. What I heard filled me with longing, disgust, pity and nostalgia. A Jordanian friend had chicken kabobs and falafel and yogurt salad for lunch. Mexicans remembered burritos and tacos laden with beans and vegetables. A friend from la



WHAT KIDS EAT IN SCHOOL THE WORLD OVER

FRANCE: GRAPE FRUIT STARTER, GRILLED CHICKEN AND GREEN BEANS, CHEESE AND RICE PUDDING

USA: BURGER AND CHIPS, FIZZY DRINKS, BURRITOS, PIZZA, FRENCH FRIES, CHOCOLATE MILK OR MILK

NORWAY: OPEN FACED SANDWICH, MILK, YOGURT OR FRUIT DRINK

UKRAINE: BORSCH, SAUSAGE OR MEAT CUTLET OR MASH, PANCAKE OR SYRKY, TEA IS AVAILABLE WITH PASTRIES IN SMALL AMOUNTS.

NETHERLANDS: BROWN BREAD SANDWICHES WITH MEAT OR VEGETABLES, MILK OR FRUIT JUICE.

SWITZERLAND: SALAD, POTATOES, MEAT WITH RICE OR PASTA, FRUIT OR CHEESE

SWEDEN: SALADS FROM A SALAD BAR, SANDWICH WITH MEAT, BREAD SOMETIMES MADE FROM RYE, MILK OR UNSWEETENED LINGONBERRY JUICE

KOSOVO: TURKISH BREAD WITH MEAT, DONNER KEBABS, YOGURT DRINK, CHEESE AND SODA

UGANDA: MAIZE PORRIDGE, BOILED BEANS AND STEAMED BANANAS

JAPAN: PICKLED SALAD, FISH, TOFU, VEGETABLES, SEAWEED MISO SOUP, PICKLED SALAD, FRUIT

belle France recalls a childhood where they were fed fresh cooked meals in the school room.

France deserves special mention. Even though French schools are tragically under-funded, enormous care is taken to ensure that the children get wholesome and nutritious meals. Lunch hour can extend up to two hours. Children in school are expected to take food seriously and to appreciate good wholesome meals. Charming, they are served adult food in smaller portions - on proper plates with the appropriate silverware.

These kids don't eat from plastic trays and drink milk from recycled cartons made of cardboard. It might seem inconsequential, but the basis of a good relationship with food comes from many little details like respect for the food, aesthetics and the proper protocol like eating with the right utensils, setting aside a time to have a relaxed sit-down meal etc. It encourages a sense of community and joie de vivre around the act of eating. It is no longer a chore, but a daily, anticipated pleasure.

For Japanese kyushoku or school, parents pay a small amount for the ingredients and the labour involved in making these lunches is borne by the local authorities. The Japanese people are the most healthy people and hold the record for longevity. Fresh fish, meat and vegetables are delivered fresh to kitchens everyday - where they are held at appropriate temperatures and food is cooked on the premises. Vegetarian children and those with allergies have special menus.

The key in Japanese meals, too, is to offer a variety of food so they don't get bored. This is done without indulging them with fast food options. They are treated to food as though they are adults. No kid who has had a variety of food will wrinkle his nose at tofu or fish or seaweed. They also mix and match western style lunches with traditional Japanese meals so these kids know their baguette from their rice. This is not sloppy mush piled on to plastic trays.



Japanese Bento boxes are the equivalent of our tiffin boxes with compartments for a variety of food items, fish, meat, vegetables. They can be steamed and had hot during lunchtime.

Meanwhile, in the western world, my English friends refuse to talk about school lunches. They sport an frightful look of repressed pain and suffering in their eyes. The food reflected the strained days of rationing in the Post-War years. But as the years progressed and even after England became populated by french speaking snooty chefs, the school lunches did not seem to improve.

When Jamie Oliver, a young English chef, attempted to make changes in the school lunch system, perplexingly, some parents went up in arms against him because the kids wanted french fries back! His well-intentioned attempt to herd children back to healthful eating habits backfired when the allure of deep fried foods and pizza and french fries and sugary drinks defeated fruits, vegetables, grains and fresh cooked meat. No amount of intervention will save a teenage obesity crisis if the parents don't step up and support the efforts to reach out to children.

Meanwhile, my American friends seemed not to carry any such trauma. Although, they probably should because their list of school foods included, peanut and jelly sandwiches, peanut and jelly sandwiches and did I mention peanut and butter sandwiches? Of course, those who ate school lunches were introduced to the hideous and vile slop served by catering firms that were contracted by school districts. Not very long ago, less than 10% of the school food was actually cooked onsite.

Most food was delivered frozen, canned or packaged. It contained enough preservatives to prevent spoilage of corpses and possibly enough to make them glow in the dark. These foods were subsidised by the government so that food companies that used corn syrup received tax breaks and sops. Which perfectly explains why there is so much corn syrup in all American food products. Tomato ketchup does not require high fructose corn syrup as an essential ingredient, yet, there it is!

Increasingly compelling and disturbing evidence seems to suggest that english speaking countries have a sobering and un-fun manner of eating. Food is associated with guilt and want. They swat their own behinds

every time they reach for something delicious or rich. Arabs, French, Spaniards, the Japanese and yes, even Indians recall with nostalgia the food of their childhood, regardless of whether it was a sumptuous feast or a humble bowl of rice. The English and the Americans often remember dinner and lunch from cans. Let us bow our heads and ponder upon the travesty that is canned potatoes.

BACK TO INDIAN LUNCHBOXES

Now that India is officially considered a nation that has adopted English as it's unofficial national language, we ought to be careful so as to not sacrifice our food culture. Have you looked into your child's lunchbox? Maybe you have a cook...maybe you give your child lunch money... maybe the school provides the lunch, but if you are not packing lunch yourself, you might want to take a peek into that mid-day nourishment.

Picky children are not born that way, they slide into a state of fussiness. Treat them like mini adults rather than younglings who need pampering. It is ok if they don't always adhere to your nutritional wisdom, but do not indulge them with chocolate or cola or anything that the child seems to favour excessively. It is excess that is the foundation of bad food habits in the future. A child does not develop fussy habits because he doesn't like something, but only because he knows he can get away with plenty of what he favours. Given time, anyone can learn to love broccoli and spinach.

Indian cuisine is wonderful and the ingredients are limitless. Lentils, pulses, grains and vegetables can form a wholesome meal. Children when they are growing up need minerals, vitamins and other nutrients. The secret weapon in our arsenal is our legendary spices. All over the world, Indian spices and ingredients are a source of envy. A little bit of creativity, take control of your child's future health. The lunch you pack may be the best investment made yet for your child! ♦



LALITHA VISVESWARAN

Prepares ticking food bombs loaded with butter, sugar and a smattering of french curse words for public consumption. Has been held captive by felines for many years now. Other preoccupations include baby seats, rain forests, global warming, and cellulite. Lives in Fremont, California.



Lunch Box Suggestions TEXT AND PHOTOS: LALITHA VISVESWARAN

PUMPKIN-COCONUT SOUP

Ingredients

- ▶ 2 shallots, finely chopped
- ▶ 2 cloves garlic
- ▶ 2 'coins' ginger
- ▶ 1 stalk lemongrass
- ▶ 1 thai green chilli
- ▶ Water
- ▶ 300gms firm yellow pumpkin
- ▶ 200gms coconut milk/cream
- ▶ Thai basil leaves, for garnish
- ▶ Salt and pepper

Sautee crushed ginger, green chilli and garlic in a little oil.

Add finely chopped shallots and sautee without burning.

Crush lemon grass stalk and add to the above.

Add the pumpkin, cut into cubes.

Add enough water to cover.

Bring to boil, turn down heat and simmer until pumpkin is done.

Puree until smooth. strain through a sieve.

add coconut cream/milk.

Add salt and pepper to taste.

Garnish with basil leaves.

VEG PAD THAI

Ingredients

- ▶ 200 gms thin and flat rice noodles
- ▶ 1 cups bean sprouts
- ▶ 2 'heads' of bok choy or chinese cab
- ▶ bage, chopped bite sized pieces
- ▶ 1 spring onion
- ▶ handful of cilantro
- ▶ 2 tbsp ground peanuts
- ▶ 2 cloves of garlic

For the Sauce

- ▶ 1/2 tbsp tamarind paste
- ▶ 3 tbsp water
- ▶ 2 tbsp soy sauce (or 'vegetarian' fish sauce available in stores)
- ▶ 2 tbsp chilli sauce

Add all sauce ingredients in a saucepan and bring to a boil. strain. set aside.

Soak pad thai noodles until done or follow instructions on package.

Sautee bok choy and bean sprouts in oil that has been flavoured by the garlic.

Toss in cooked pad thai noodles.

Toss in the prepared sauce.

Top with ground peanuts, cilantro and spring onions, finely chopped

The idea of a hot lunch is always appealing. Insulated lunchboxes and tiffin carriers do retain some of the warmth, if not the heat, of the cooked lunches. There are stylish lunchboxes with multiple compartments available in the market. Stay away from plastic – it absorbs odours and probably flavours of lunches past. Glass and stainless steel are the best bet!

SPINACH-CHANNA-TOMATO SALAD

Ingredients

- ▶ 4 cups baby spinach leaves, whole(chopped if the leaves are larger)
- ▶ 1 clove garlic
- ▶ 1 cup channa also known as garbanzo or ceci beans
- ▶ 1/2 cup tiny sweet grape tomatoes
- ▶ 2 tbsp sunflower/ pumpkin seeds or toasted pinenuts

Crush garlic clove in olive oil. dont burn the garlic. add the spinach leaves. it will shrivel to about 1 cup in its cooked state.

Add the ceci beans and grape tomatoes.

Top with toasted seeds/ pinenuts.

EGGPLANT WITH WALNUT SAUCE OVER MINT-LEMON RICE

Ingredients

- ▶ 1 large eggplant (1 1/4 pounds)
- ▶ 4 level tablespoons tahini
- ▶ 1/2 teaspoon garlic, peeled and crushed with salt
- ▶ 3 tablespoons fresh lemon juice or more to taste
- ▶ 3 to 4 tablespoons cold water
- ▶ 1/2 teaspoon salt
- ▶ Dash of freshly ground black pepper
- ▶ 1 tablespoon olive oil

Grill or bake eggplant, crush with a spoon until it is pureed well.

Add tahini(sesame sauce available in stores), garlic, lemon juice and olive oil.

Season to taste, add water to thin eggplant dip if necessary.

- ▶ 3 home-style slices bread, crusted removed
- ▶ 6 cloves garlic, peeled and smashed
- ▶ 1/2 teaspoon salt
- ▶ 1 cup finely chopped toasted walnuts
- ▶ 2 to 3 tablespoons fresh lemon juice
- ▶ 1 cup extra-virgin olive oil

Soak bread slices in water, add rest of the ingredients and blend until smooth.

- ▶ 1 cup cooked basmati rice
- ▶ 1 tbsp butter
- ▶ 1 cardamom pod
- ▶ 2-3 strands of saffron
- ▶ 2 tbsp lemon zest
- ▶ 2 whole mint leaves
- ▶ Salt to taste

Flavour fragrant basmati rice with cardamom, saffron, lemon zest and mint, fork in the butter for richness.

BLACK BEAN SOUP

Ingredients

- ▶ 2 tablespoons olive oil
- ▶ 1 onion, chopped
- ▶ 1 carrot, chopped
- ▶ 4 garlic cloves, chopped
- ▶ 2 teaspoons ground cumin
- ▶ 1 to 2 teaspoons chopped jalapeño chilli with seeds, divided
- ▶ 400-600 gms canned black beans, undrained (or prepare at home, soak beans the previous night, pressure cook until done after 12 hours of soaking...use about 600 grams of cooked beans)
- ▶ 400 gms can small diced tomatoes in juice (or use fresh tomatoes that are skinned and deseeded)
- ▶ 1 1/2 cups water
- ▶ Chopped fresh cilantro
- ▶ Chopped green onions

Add onion to oil, sautee until soft.

Add the carrots, garlic, chillies and ground cumin.

Add the beans and tomatoes with water.

Bring to a boil, simmer.

Top with cilantro and chopped green onions.

BELL PEPPER FAJITAS

Ingredients

- ▶ 2 cups multi coloured bell peppers, cut into strips
- ▶ 1 tsp cumin seeds
- ▶ 1 red onion
- ▶ 1 garlic
- ▶ 1 tortilla(or a large whole wheat roti/chapati...tortillas are generally made from corn)
- ▶ Sour cream, 2 tbsp

Add cumin seeds to a tbsp of hot olive oil. Sautee red onion and garlic together until soft, add multi coloured bell peppers cut into strips, cook until soft.

Fill the tortilla and top with sour cream.

Onions, potatoes, eggplant are best prepared just before the cooking. Vegetables that can be prepared ahead include shelled peas, grated and diced carrots, cucumber etc. Involve your kids in chopping, dicing, grating vegetables. It will keep them in touch with their food, and little chefs grow up to be adults with a better food sense.

While fruit juices count as a 'serving of fruit' in your child's daily diet - the downside is that they lack the invaluable fibre content of whole fruits. Chewing and swallowing whole fruit takes time, which is good. Fruits can be prepared as cubes and skewered onto drinking straws as 'fruit kebabs'. For example - alternate melon cubes and whole grapes or strawberries and pineapple cubes, mango cubes and orange segments. Fruits like apples and bananas darken if they are cut ahead and exposed to air. This is purely cosmetic and does not take away the nutritive value of the fruit. If you do choose to cut them earlier, moisten them slightly with lemon juice to prevent the darkening.





REFORESTATION

What percentage of the human population is actively involved in saving the planet? Jungle Retreat's reforestation project challenges children to think and *do*, rather than just use politically-correct words.

TEXT AND PICTURES: AYESHA SITARA

For many years now, naturalists have been harping about the loss of natural habitat and its harrowing threat to the existence of flora and fauna species in various ecosystems. The world today is doctored by a very urban attitude with little concern for natural environments and their enormous consequence to our very existence.

Climate change, degradation of forests and loss of natural habitat seem to be a 'hot' topic in media the world over but the current exposure seems only to be scratching the surface rather than being involved with real challenges. The *real* question is – what percentage of the human population is actively involved in saving our planet?

Every year the IUCN publishes a red list of threatened, critically threatened and endangered species, threatened forests and extinct species. With each passing year the list is growing longer instead of reducing. With the threat of more and more loss looming large, it has become a Herculean task for conservationists to keep up the pace.

Tigers may no more roam this earth, orchids may not bloom and jungles will be invaded for want of a materialistic answer. When the end comes, we will be gone too. Extinct. Our epitaph should probably read: "Humans – species that walked this earth; now extinct"

Today the greatest challenge facing the environment is loss of natural habitat which sets off a vicious circle of loss of species. From the rainforests of South America to dense jungles of Borneo, from the deciduous forests of South India to the cold habitats of Siberia – conservationists, scientists, naturalists and volunteers are fighting hard to save the ecosystem. The percentage of such people is small, but they are driven with passion, hope and sometimes even eccentric determination to help save the planet. We have to applaud the efforts of such conservationists trying their optimum to fight the war that we created.

One such team is Jungle Retreat, a wildlife resort in the Mudumalai region of the Niligiri Biosphere Reserve. The first reserve to be set up in India, it is a vital bio-diversity hotspot of the vast Western Ghats, supporting a wide variety of plant and animal species. The forests extend from Karnataka to Kerala into the Mudumalai region in Tamil Nadu. The Mudumalai region alone is home to diverse habitats such as tropical moist deciduous forests, tropical dry deciduous forests and southern tropical thorn and home to over 320 bird and animal species.

Jungle Retreat skirting the Niligiri hills in close proximity to the Mudumalai Wildlife Sanctuary and National Park is spread over 35 acres. Owner Rohan Mathias converted what was once a sericulture plantation devoid of trees into a home for many a resident bird and animal species. Twelve years on, Rohan has seen the fruits of his vision. "This endeavour has proved that any land that has been



CHILDREN WHO GROW UP IN CITIES GET CAUGHT UP IN A CAULDRON OF MATERIALISM AND NONCHALANCE. THE UMBILICAL CORD WITH NATURE HAS BEEN PREMATURELY CUT BECAUSE OF AN INSOUCIANT ATTITUDE.

stripped off its natural flora and fauna can be revived with adequate attention, protection and care. It is never too late and it is never impossible" says he.

"The vision has borne sufficient fruit thus far which has been personally satisfying and is an incentive to carry on. It will remain close to my heart with deeper passion and meaning and I hope to carry it to another level in the fight to save lost habitats" Rohan adds.

Today over a hundred species of birds, herds of deer, giant squirrels and other small mammals have become resident delights. This success primarily points towards the continuing efforts in the field of regeneration and reforestation of indigenous trees. By extending its

arms to various schools and organizations in the cities to help support the endeavour, this educative initiative is not confined to only the team at Jungle Retreat. Last year a number of students from a Bangalore school were given the opportunity to plant indigenous trees within the campus.

"Jungle Retreat being a wildlife resort is a commercial venture. However, I believe that there is enough space for me to follow my heart and my passion as well within this environment. I personally feel that I need to do something to save the ecosystem. Charity begins at home and so I thought it best to create an initiative in my own backyard," says Rohan. "The best way to set the ball rolling is by nurturing the youth. Samplings when carefully nurtured grow to become mature trees, so why not the children of today?"

Children who grow up in cities get caught up in a cauldron of materialism and nonchalance. The umbilical cord with nature has been prematurely cut because of an insouciant attitude. To counter this problem, it has become increasingly important for schools to adopt a certain responsibility to rekindle the interest and encourage a way to bring about a change in the attitude. The key to breaking the materialistic attitude lies in a learning process that helps them embrace a love for nature from a very young age.

Tito Chandy, an avid naturalist and conservationist, who ran the camps for the schools feels, "Today

children are politically correct and speak up about environmental issues by using the correct words, but they have not faced a situation that challenges them to think about it. The reforestation project process challenges them to actually think than glibly use politically right words."

The hands-on experience of digging pits, collecting samplings, handling fertilizers, getting dirty and muddy puts them in a situation like never before. They are challenged with doing manual labour – a far cry from their cosy world back in the city. Their understanding of the issues they talk correctly about takes a greater meaning when they have essentially contributed to the issue in hand.

At the reforestation camp, they learn and experience the implication simultaneously. There is an emphasis on thinking about the consequences of their choices and behaviour – why we need to save the planet, why we need to plant a tree that is favourable to that region alone, what it entails for the species around in a particular season, etc. The experience by itself is not sufficient, the challenge to think and then ask questions is the greater half of the whole experiment and process.

The reforestation of indigenous trees camp at the Jungle Retreat helps children explore the natural world and open their hearts to a window of opportunities in the future.

WHY REFORESTATION

Rainforests forests once covered 14% of the earth's land surface; now they cover a mere 6% and experts estimate that the last remaining rainforests could be consumed in less than 40 years. The more serious threat is the alarming rate at which they are lost – one and a half acres every second – leading to tragic consequences for both developing and industrial countries.

Many of the large rainforests of the world seriously affected by the culling of trees forebode a greater quandary – half of the world's species of plants, animals and microorganisms will be destroyed or severely threatened over the next quarter century. Experts estimate that we are losing 137 plants, ani-



AT THE REFORESTATION CAMP, THEY LEARN AND EXPERIENCE THE IMPLICATION SIMULTANEOUSLY. THERE IS AN EMPHASIS ON THINKING ABOUT THE CONSEQUENCES OF THEIR CHOICES AND BEHAVIOUR

mal and insect species every single day due to rainforest deforestation. This equates to 50000 species in a year. As we lose the flora and fauna and many other significant species to a world thriving on materialism, so do many possible cures for life-threatening diseases. Currently 121 prescription drugs sold worldwide come from plant-derived sources – 25% of western pharmaceuticals are derived from rainforest ingredients.

This year Jungle Retreat plans to extended its family of schools to institutions who wish to take their commitment to the environment many steps further by conducting the reforestation camps at Jungle Retreat as part of the curriculum. This learning process will include identifying the indigenous trees, their importance to the region, the inter-dependence of indigenous

trees to birds and mammals, especially concentrating on endemic and endangered species. Most significantly, the students will be taught of the disasters of already lost habitats and how they could help in saving others from becoming catastrophic.

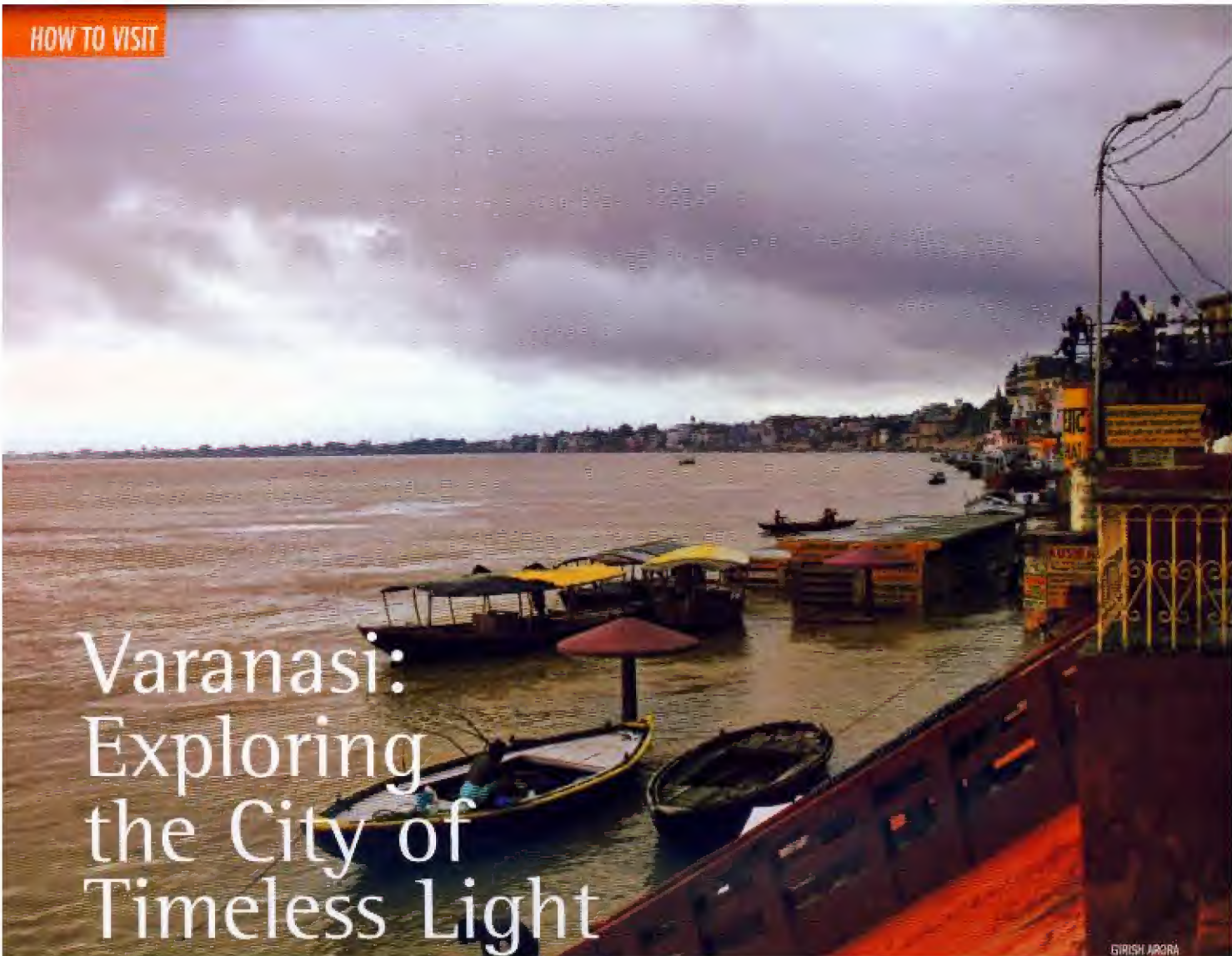
These educative camps are run in a very professional way with leading experts as part of the faculty. The faculty includes a team of naturalists, team leaders and experts in bio-diversity. The children are taught to think out of the box and not just stop at the theoretical levels. The students take an active stance by digging pits, planting the trees, watering them, mulching, fencing and finally marking them with their scientific names and common names.

Leaders and experts in the field of natural environment are convinced that this kind of an educative approach can help nurture naturalists who may rewrite our species' epitaph. The world is big enough for many many more Sunderlal Bahugunas and Jane Goodalls. ♣



AYESHA SITARA

Began her career with mainstream journalism, before the curious naturalist in her made her chuck it all for a life away from the maddening crowd. Creates awareness about the wild using her skills as a photographer and filmmaker. Is working on a book on the Nilgiri Biosphere Reserve.



Varanasi: Exploring the City of Timeless Light

GIRISH ARORA

TEXT: SHAGUFTA BHARDWAJ

PHOTOS: SHAGUFTA BHARDWAJ, GIRISH ARORA

You will be surprised to discover that what meets the eye in Varanasi (the erstwhile Banaras or Kashi) isn't actually ancient. When Twain visited the city in the winter of 1896, almost none of its thousands of temples, soaring mosques, stately palaces, or illustrious monasteries were more than three-hundred years old. The grand structures of earlier centuries had long since been destroyed or buried under new settlements. And yet in spite of that, Varanasi does appear to have risen from the banks of the Ganga long before even humans came here.

It's one of the paradoxes of the city that continues to enthrall pilgrims and tourists alike. For centuries, people from diverse backgrounds and faiths have visited or lived in Varanasi – and so the cosmopolitanism in traditions – architec-

tural, oral, and literary. Kingdoms and empires big and small have vied to leave their mark.

The grand palaces, temples, and mosques that tower over the river's edge are testimony to the royal importance of Varanasi. To the Islamic rulers and the British, it was a place of great commercial and strategic importance; for Hindus it has always been the home of Shiva, the point on Earth where his luminosity and grace could be experienced most profoundly by the devotee. Like visitors today, Mark Twain was troubled by the pollution of the Ganga and the temple priests cheating pilgrims. But the spirit of Varanasi still left the American author in awe.

"BANARAS IS OLDER THAN HISTORY, OLDER THAN TRADITION, OLDER EVEN THAN LEGEND AND LOOKS TWICE AS OLD AS ALL OF THEM PUT TOGETHER"

Mark Twain on Varanasi

Find your way to a quiet spot high above the Ganga. There you can also



discover why sages and travelers the world over have been drawn to this holy city for longer than anyone really knows.

There are three ways to explore Varanasi – by foot, boat, and rickshaw – and you'll probably find yourself using them all. You can also rent a bicycle.

Most visitors agree that the best time to appreciate the life of the city is during the 'Subah-e-Baranasi.' Rent a boat around six in the morning and cruise along the misty shore line to witness a panorama that has played out everyday for centuries. You will see men and women wading into the cool waters for their morning prayers and ritual baths. Behind them bells will ring out from the temples and ashrams that soar above the river.



Start your boat ride from the last of the prominent ghats in the south of the city, Assi. The structures of special interest at this ghat are Hotel Ganges View built by Dulhan Radha Dulari Kunwari of Chainpur, Bihar in the early 20th century, Assi Sangameshwara temple, and Ganga Mahal, a two-storied 20th century palace belonging to the Maharaja of Varanasi.

Though a hotel, Ganges View is one of the most prominent cultural addresses in Varanasi. The proprietor, Kt. Shashank Singh, a descendent of Radha Dulari, is as much an art lover and patron as his ancestors. The hotel's main drawing room is filled with paintings, antique furniture, and other fine decorative arts; it is the venue for regular classical music recitals and lectures. Make an appointment with Shashankji to learn of the great artistic and cultural traditions of the city.

Farther north from Ganges View, Ganga Mahal houses the Swedish Centre for Indian Culture and the India office of World Literacy of Canada. Next to this is the Rewa Kothi, said to have been built by the royal puro-

hit of Maharaja Ranjit Singh of Punjab. In the late 19th century, the kothi was bought by the Raja of Rewa, who later donated it to the Banaras Hindu University.

As you move along the river you will see Tulsi Ghat. It is believed that here, in a house high above the Ganga, Tulsi Das composed the Ramcharitamanasa in the late 16th century. You can still visit the room, now converted into a temple, where he is said to have penned his epic poem. The temple is a good stop for photographing the river and ghats below. A glimpse of Banarasi life can be seen behind this spot in the Akhada (wrestling arena) supposedly started by Tulsi Das himself.

Tulsi Ghat is the centre for great festivities in the month of Ashvina (September-October) and Kartika (Oct-November) when Krishna-Lila and Ram-lila are performed here. Next to the Tulsi Das temple is the office of an NGO 'Clean Ganga Campaign,' that strives to create environmental awareness and reduce pollution in the Ganga.

A short walk away in the lanes behind Tulsi Ghat is the Lolarka Kund, an ancient sacred pool, whose waters are believed to have great healing powers. Though the Kund finds mention in the Mahabharata, it was only through the efforts of the Maratha queen Rani Ahilya Bai and the King of Cooch Behar in the late 19th century that it was built into its present form. A few

steps away from here do not miss the unique, Indo-Saracenic, brick and stone water works built by the British in the late 19th century.

Returning back to Tulsi Ghat, continue down the river past the Vaccharaja and Jain ghats where you will see local people bathing and exercising. Jains believe that their seventh and twenty-third Tirthankaras were born



in Varanasi. Many members of the Jain community live in this quarter of the city. Mallas, the boatmen, also live on this and the next two ghats. It may be interesting to ask your boatman about the Malla community and their customs. A temple dedicated to king Nishada, who is venerated by the boatmen, was recently built here.

Following this ghat are Panchakota and Chet Singh's ghats. Here you will see palatial buildings and temples built by the royal family of a small state in Bengal, as well as by Chet Singh, the Maharaja of Banaras in the late 18th century. The fortified ghat of Chet Singh reminds us today of the battles that once happened here between the Singh and Warren Hastings, the then British Governor-General.

Continuing down the river you will pass Dandi Ghat (where Dandi Swamis bathe and perform their rituals), Hanuman Ghat (famous for temples and Akhadas), and Mysore Ghat (built by the royal family of Mysore in the early 20th century), before arriving at Harishchandra Ghat, one of the two cremation places on the river front. Death in Varanasi is an event to celebrate. Dead bodies covered with shining, colourful shrouds are brought to either of the two burning ghats for cremation.

To die in Varanasi and be cremated in this holy city is considered extremely auspicious. For centuries in India, householders who have finished performing their worldly duties have taken refuge in the city and awaited their death. To die in the city is believed to be a passport to liberation of the soul.

After crossing over a couple of ghats, you will reach Vijayanagram or Kedar Ghat, easily identified by the red-and-white striped steps and the Dravidian-style construction of the temple there. Most of the city's South Indian population resides near here in houses owned by the religious institutions. Passing by the Masarovar (built by Raja Man Singh of Amber), Someshwara and



Ahilya Bai Ghat (the Queen of Indore), you will reach the most colourful of Banara's ghats, Dashashwamedh.

Leave your boat behind here to delve into the bazaars of the old city. As you walk from Dashashwadh toward Chowk, you'll see colourful banners for flashy saree stores brush beside crumbling mansions built by prominent citizens of the city. Recharge yourself at the A.C Shahi and Kesari Restaurant for Banarasi food. A visit to the city is incomplete without experiencing a special Banarasi thandai and a paan.

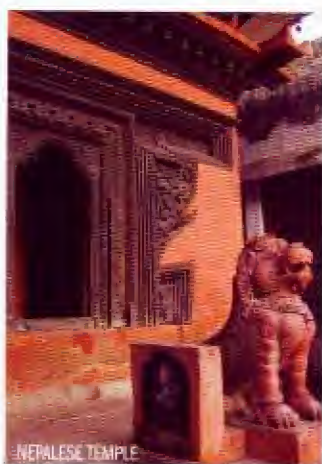
The area surrounding Chowk is referred to today as the Old City. Though the earliest settlements in the region were in the northernmost part of Varanasi, Chowk was the most densely populated in the 18th and 19th centuries. Start your walk in this area by entering the Vishwanath gali near Bansphatak. You will see policemen at the entrance of this narrow lane that takes you by small, colourful shops selling everything from ritual objects to sarees.

Interesting things to buy here include wooden toys that are locally produced and hand-drawn pilgrim maps. A sea of flowers and stalls selling offerings will direct you to the Vishwanath temple at the end of the lane. This is the most famous temple of the presiding deity of Varanasi, Lord Shiva.

The oldest Shiva temples in this vicinity were destroyed by invaders and finally by Aurangzeb who built a mosque over the site of the earlier Vishwanath temple. But the destruction did not deter Shiva's devotees from rebuilding. In 1776 Ahilya Bai of Indore and a generous endowment from Maharaja Ranjit Singh in the early 19th century helped make the temple what it is today.

An offshoot from the Vishwanath Gali will lead you to the main cremation ghat of the city, Manikarnika. If burning pyres give you a weak stomach make your way instead toward the top of Lalita Ghat. You will find





here a small Nepalese temple in wood and brick with exquisite carvings. A large number of Nepalese boys are sent here even today to learn Sanskrit.

Beyond the smoke of Manikarnika Ghat you will see high bamboo lanterns or Akashdeeps, placed by people to illuminate the path to heaven for their ancestors. Walk ahead past

Scindia and Ram Ghats. Though at present dilapidated, Scindia Ghat still shows vestiges of its past magnificence. A beautifully carved Shiva temple collapsed into the river here over 150 years ago. This ghat marks the beginning of the Maharashtrian part of the city. End your walk along the river at the newly-restored Panchganga Ghat.

A flight of steep stairs here will lead you to the Alamgir mosque built by Aurangzeb atop a Hindu temple. The lanes along the mosque's western wall will lead you to the famous Thatteri Bazaar. Originally a metal works lane, Thatteri bazaar today is dominated by Gujarati and Marwari Vaishnavs.

Two must-stops in this area are the home of the famed Hindi author Bharatendu Harishchandra (1849-1882) and the Sher Wali Kothi. Mr. Girish Chandra Chaudhari, a descendant of Bharatendu who now lives in the house with his family, can tell you stories of his ancestor's famous life. Avoid visiting Mr. Chaudhary during afternoons when he rests. Sher Wali Kothi is a beautifully painted Krishna temple in a late 19th century haveli. It was once the home of an illustrious Shah family of Varanasi and only converted into a temple after a thorough washing with Ganga water!

Walk back to Chowk and continue your way to the main police station of Varanasi. You will see a lane next to the police station full of plastic products. Follow the lane to reach Nariyal Bazar. Here you can meet Saira Begum, one of India's last exponents of the 'Old School' of Thumri and Dadra. Hearing her sing may be your last chance to experience the pure melodies of another era, untouched by commercialism or fame. To find her in the chaos of Nariyal Bazar is

surprisingly easy. She lives next to Narayan Kedar Gote Wala. The sound of alaaps will lead you to her.

To experience the academic legacy of the city, head south in the morning by rickshaw or bicycle to the Banaras Hindu University. The best spots for strolling here are the large, tree-lined avenues near the playing fields and the Vice-Chancellor's house. The university museum Bharat Kala Bhawan houses a remarkable Mughal and Rajput miniature painting collection. Also worth visiting are the sculpture and the Alice Boner galleries. A Vishwanath temple built by the Birlas on the university campus is perhaps one of the cleanest and quietest temples in Varanasi. Donations here go toward supporting university students from low-income backgrounds.

Traveling through the lanes of Varanasi, you will notice everywhere one of the mainstays of the city's economy: the textile industry. Locals believe that Buddha after his mahaparinirvana was covered in a cotton shroud woven in Varanasi. Muslims brought with them the art of fine silk weaving. The local belief

is that a group of weavers from Central Asia visited Varanasi and decided to settle here. Through marriage and interaction with locals, this group passed on their knowledge. Banarasi silk was favoured by princely families. No trousseau would be complete without a couple of Banarasis.

Today most of the weavers work out of the Pili Kothi and Madan Pura areas.

Hemang Agrawal, a young designer based at Siddhmata Lane near the Gol Ghar area, is trying to recreate and revive some of the lost techniques and patterns of the city. Meet Hemang at Sulekha Arts to understand the complex world of Banarasi warp and weft.

Every tiny lane of Varanasi contains a story and a legend. If you still have time after following this guide through the city, venture into one of the side passages off a busy bazaar. You're sure to happen upon across a small shrine, temple, or haveli with a history waiting to be discovered. Talk to those you find in these corners of the city and learn a forgotten tale of the City of Light. ♦



SHAGUFTA BHARDWAJ

is a cultural historian, advisor and educator, leads Sunday walks to heritage sites for the India Habitat Centre, can generally be found in the narrowest lanes leading to the oldest havelis in Delhi.



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DYNAMIC PLAYGROUNDS



When designing for children, one needs to access the child within – and there is one waiting inside all of us. Architect Martand Khosla tells us about how stories inspired a playground.

TEXT: MARTAND KHOSLA

PHOTOS: FROM A PROJECT FOR 'ART OF THE WORLD,' DESIGNED BY MARTAND KHOSLA FOR ROMI KHOSLA DESIGN STUDIOS

We approached the creation of the playground a story where the children could redefine the storyline through the kinetic dynamics of the playground each time they engaged with it. A playground that was as dynamic as the games that unfolded on it. The playground was seen as the canvas on which a child could unlock new worlds - different from the fixed spaces determined by adults in her day-to-day life.





Although the playground we created is potentially ever changing in its structure - there is a formal structure to the space within which the moving parts define possibilities. It is placed on a regular grid of pivoting panels, set on a squared gravel pit with a diagonal undulating concrete path running through it. The path starts on the ground, then elevates into space before coming down again. (See images above)

Each pivoting panel is a plane in space that aligns and disaligns to create new configurations while simultaneously breaking old ones. An important role of any playground is to



"What we know as public spaces today, are largely spaces of supervised freedom. Roads, parks, capitols, beaches, zoological/botanical sanctuaries are all public spaces which, in their design and intent, guarantee the freedom of some while denying the freedom of others..."

"To talk about public spaces as an architectural project is also to be aware of the politics involved in their actual and potential use."

R. L. Kumar, Architect
Centre For Vernacular Architecture

allow the children to exercise and exert physically themselves. We visualized that a combination of the opaque and see-through panels would provide them with a great opportunity to play hide and seek, but in a contemporary *chakravyuh*. The core of the playground consists of panels that are relatively opaque and solid thus defining a secure center. As the space of the playground radiates outwards, the panels become more and more perforated and hence transparent in their radiating placement outwards.

Children can create enclosed, intimate, secure spaces at the core of the playground; more porous and imaginary enclosures with the panels as they spread outward; and eventually arrive at the boundaries of the playground space.

We played a little game of design and seek, where we took architectural elements, and introduced them to each of the pivoting panels. Basic architectural elements were used - a door, a window, a staircase - and we played around with them in a way that questioned and subverted their basic premise. A wall is made see through. A door stands alone in space and yet demarcates two zones, an outside zone and a zone within.

This playground is - for the children as much as for the design team - an act of irreverence towards all that architects deal with in our everyday life. The concrete band running diagonally through the playground is simultaneously a path and a diagrammatic sliver of a home which starts at the green door with a front courtyard (a public space) transforms into a bench and then as it moves towards the center of the playground, it hints towards an identity that could be wall, a roof, a bed (a more private space) and so it moves onto the rear courtyard (a semi-public space).

Four of the solid pivoting panels have been located in such a way when they interact with the sliver of the house they create a very intimate private room like space for the children to play or withdraw into.

I revisited the playground a few months after its completion. One of the children pulled me aside, "*Aao mein tumhe mera ghar dikhati hooni.*" She led me proudly to the space she had 'discovered' the enclosed



area we had envisaged as private space! Another child sat on the top of a panel while his friend spun the panel around. Not only was the playground a place to play hide and seek, it was a Jungle Gym as well as a Merry-Go-Round. Because of the dynamic quality of the playground - each child used it differently, experienced it differently.

It was a quiet space and a loud space, a systematic space and a chaotic space, a static space and a kinetic space ñ but it was always a space that belonged to the child, within and without. For us as designers, it remains an important component of our extended architecture where design is used to change the experience of space. ✦



MARIAND KHOSLA

Wonders why can good design can't be made available to all. Has been part of an effort to build low-cost housing in UP, a hospice for the destitute in North Delhi, and playgrounds for underprivileged children around the world. Runs an architectural practice in New Delhi.



ON RAISING 'Taare Zameen Par'

Amole Gupte and Deepa Bhatia are the award-winning duo behind this year's biggest sleeper success. *Mindfields* meets the parents of *Taare Zameen Par*.

WHAT WAS YOUR OWN SCHOOL EXPERIENCE LIKE?

AG: It was in the late 1960s and 70s. Egged on by the ranking system, having seen Christopher Braganza stand 1st in Grade 1; I cracked the code and stood 1st in Grade 2. My mother, who had worked hard on me, gave me a rupee to buy *barf ka gola* for the children who hung out with me at building gate. Standing 1st was a big mistake, I soon realized. It was something that had to be repeated throughout the school years. Lose your rank, and there were a dozen people to answer to.

Thankfully, I got into art, elocution, school theatre. Theatre and art brought special concessions. Sometimes the school principal, a Spaniard named Rev. Father Aliou, would drop me home on his Harley Davidson after an evening rehearsal. Then he'd join our family for *basundi-puri*, speaking in Shuddha Praakrit Hindi. That was a side of him few other children knew about...for the rest, it was the Cane!

DO YOUR EXPERIENCES FIND AN ECHO IN THE TAARE ZAMEEN PAR SCRIPT?

AG: Guppy fish hunting in the gutters; skirting the school wall to bunk school and wander about like a cow; the absent note requested from a neighbour citing dad's absence and mom's inability to write in English (a complete fib, of course); dad discovering the note - it's all there in the film. Rajan Damodaran, both legs in calipers, was surely my spirited bench mate in Holy Family School. Holkar Sir wasn't a caricature either - he'd make invisible chalk points on the board and rap our knuckles if we couldn't sight them!

No one made an issue out of the ruler-and-cane regimentation back then. Back-benchers and 'repeaters' happily continued rebelling and toughening the skins that guarded their self-esteem. The antihero was always the hero. However much I tried to excel in studies, theatre and art; the back-benchers got all the awe. Without naming them, I raise a toast to them.

The way the success mantra drives schools and parents today - the heroic antiheroes of my classroom would have been branded, labeled, and shunted out of the mainstream and into a special school today.

YOU HAVE WORKED WITH CHILDREN WITH DYSLEXIA FOR OVER 7 YEARS...

AG: I have never 'worked' with children. They aren't workers, and neither am I. Yes, I have had fun-filled sessions with all the children I have interacted with. Some of them were wired differently, but then no child I know of has been produced in a factory and sent down the assembly line. Ironically, though, there is an Assembly Line in every school!

A lesson I learnt at the outset was - don't be daunting and you shall be communicated with. I have lived through my summer sessions at the Maharashtra Dyslexia Association in a 'frogesque' way. In fact, they know me as 'A-mole frog'. I begin sessions from a lower angle where the children tower over me.

Every child will grace you with her magic if you make a prayer out of her gurgle. There are stories to be heard and told, to be sketched and coloured, to be sung as well! What more would a child want, whether she is dyslexic or not? My respect for my friends at these sessions has been *earned* by them.

'Chandu Patil' a khadi-clad Indian super-hero has been a hit with all children during my workshops. They enact this indigenous super-hero who doesn't wear 'undies' over his pants like the imported ones. They have painted their versions of the mustachioed Chandu, written songs in his praise and screenplays about his valour...

THERE WAS A NIKUMBH SIR IN YOUR OWN LIFE...

AG: Ramdas Sampad Nikumbh was my art teacher in Hansraj Morarji Public School, Mumbai. He later became principal of the same school.

Twice-awarded by the state for his lucid teaching abilities, he brought us all out into the open. It was Renaissance for us. I benefited tremendously from his influence. He appreciated my being a rolling stone. I owe my vision to him. A magical gnome, our Sir was. Truly, the Pied Piper.



THE HEROIC ANTIHEROES OF MY CLASSROOM WOULD HAVE BEEN BRANDED, LABELED, AND SHUNTED OUT OF THE MAINSTREAM AND INTO A SPECIAL SCHOOL TODAY.

YOUR WIFE DEEPA BHATIA FIGURES PROMINENTLY IN YOUR CONVERSATION. HOW DOES YOUR COLLABORATION WORK?

AG: It is the collaboration between parents raising their baby in an environment they have created and kept free of gender bias and egotism. Deepa is my buddy, my life - a truthful human being, balanced critic and rare creator. *Taare Zameen Par* is Deepa's concept, research, edit. She's the mother of our two children - *Taare Zameen Par* is eight years old, Partho is seven.

YOU WORKED CLOSELY WITH AAMIR KHAN (DIRECTOR) ON THE MAKING OF TZP...HAS IT REMAINED TRUE TO THE SPIRIT OF THE STORY YOU WROTE?

AG: I have worked closely only with Deepa in order to guard the vision of the film. As far as script, casting, songs and locations are concerned, Aamir clearly acknowledges my sole contribution and discretion as the director of the film. I guarded the vision of the project throughout the shooting, including the shot-to-shot nuances of direction, while Deepa guarded the vision in the edit. And so the film has remained true to its origin, the script.

COULD YOU TELL US ABOUT THE PROCESS OF CREATING ISHAAN AWASTHI'S ARTWORK...THE CHOICES YOU MADE, THE CONTENT MATTER YOU CHOSE...

AG: A child's impulse is to feel paint with his/her fingers. The vivid memory of a day well spent. A magical motion of yellow, orange and red. The hot-cool demeanor of a *barf ka gola* forming in front of an observant painter, Ishaan, and his choice to begin the wonderful process all over again, on paper this time.

So many Ishaans over the years have left their pugmarks on my mind, these are the impressions I have showcased in Ishaan's art, on his wall, in his paintings.

TZP SET A BENCHMARK FOR UNCONVENTIONAL SCRIPTS IN THE HINDI FILM INDUSTRY...

AG: *Taare Zameen Par* is as real as *Grapes of Wrath*, *Meghe Dhaka Tara*, *It's A Wonderful Life*, *The Bicycle Thief*, *Mother India*, *Do Bigha Zameen*, *Maasoom*, *Shhwaas*...a melting-pot of core emotions without the

didactic orchestra of melodrama. The attempt to stay truthful in the narration of the concerns has succeeded in touching the nation's heartstrings. By design, the film offers a strong sense of identification with its characters for every person in the audience - man, woman or child. The box-office has thus accepted the real with the conventional.

WHAT NEW PROJECTS CAN WE LOOK FORWARD TO? WILL YOU BE HOLDING THE DIRECTORIAL REIGN SOON?

AG: Our next project is a look at the urban rural divide through the eyes of children. Its called 'India Item'. Deepa has been studying and documenting the agrarian crisis - her teacher and guide being P. Sainath. The screenplay is ready.

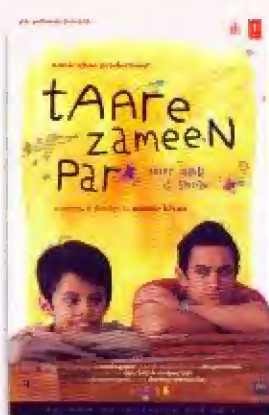
And yes, like in *Taare Zameen Par* I work in tandem with Deepa, essay to build and protect the concerns driving the project. And I'll say 'Action' and 'Cut' as well! ♦

FILM REVIEW



Every Child is Special

TEXT: RAASHIMI CHAKRAVARTI



TAARE ZAMEEN PAR, 2008

Producer and Director: Aamir Khan

Writer and Creative Director: Amole Gupte

Concept, Research and Editing: Deepa Bhatia

Music: Shankar, Ehsaan and Loy

Cast: Darsheel Safary, Aamir Khan, Tisca Chopra,

Tanay Chheda, Sachet Engineer, Vipin Sharma

Does the education system smother the creative instincts? Are children made to compete too early and too often in their school life? Are teachers sufficiently trained to detect learning disorders? Should children with learning disabilities attend regular schools?

These are some of the questions that have made their way into the consciousness of Indian parents since 'Taare Zameen Par' hit Indian theatres.

In this sensitive film directed and produced by Aamir Khan, Ishaan (Darsheel Safary) Awasthi's mother (Tisca Chopra) and brother are sympathetic to his dreaminess and rebellion, but can't hold their own against the stern and short-fused father (Vipin Sharma).

To put him on the 'right' track, Ishaan is sent to a boarding school. Here, constant negation, punishment and the apathy of his teachers only add to the Ishaan's trauma of living away from his parents. With a disability (dyslexia) which no-one seems to sense or understand, Ishaan withdraws into a shell. Enter art teacher Ram Shankar Nikumbh (Aamir Khan) who resolves to help Ishaan cope with dyslexia using special teaching methods. He also

discovers and fosters Ishaan's special talents.

Animated sequences and special effects are employed to make for a delightful peek into Ishaan's inner and outer worlds. This bit of the script is reminiscent of Bill Watterson's comic strip 'Calvin and Hobbes', where six-year-old Calvin, despite his low grades and apparent learning difficulties, has a sophisticated sense of humour, and a vividly imaginative, philosophical mind.

Visuals like the mixing of water colours on paper, the ripples in a puddle after a car runs over it are sure to send the most skeptical of adults down memory lane.

Safary gives an outstanding performance as the buck-toothed Ishaan, portraying the subtlest of emotions with effortless finesse. Aamir Khan makes an entry in the later half of the film and brings warmth to the Art teacher's trenchant, but never too preachy character. As the unconventional spike-haired teacher, he exercises great restraint in the portrayal of Ishaan's mentor, slipping briefly only in his entry song.

Tisca Chopra as the confused and caring mother pitches her emotions just right. Interestingly, all the children in the film are pitch-perfect in their character portrayals. It is the adults (like the teachers at Ishaan's schools) that are sometimes caricature-like and over the top.

The title track and the song 'Maa' (more for Prasoon Joshi's touching lyrics than melody) are the two songs that stand out in the otherwise average score by Shankar-Ehsaan-Loy.



MANY A RENOWNED GENIUS LIKE ALBERT EINSTEIN AND LEONARDO DA VINCI SUFFERED FROM LEARNING DISABILITIES AND WERE ONCE SCOFFED AT.

The detailed research done by the script writer is evident in many a scene. The scene where little Ishaan gives the meaning of a Hindi poem in his own unusually insightful words is case in point, urging viewers to note that dyslexia is not an intellectual disability.

The depiction of the joys and horrors of childhood is so moving and simply told; one is tempted not get too technical in one's assessment.

'Taare Zameen Par' conveys an important message to parents and educators alike – don't burden chil-

dren with your expectations. Don't assume that a child is a failure if he doesn't get a high percentage in school examinations. Many a renowned genius like Albert Einstein and Leonardo Da Vinci suffered from learning disabilities and were once scoffed at, but excelled in life nevertheless.

Every child is special, has his own unique abilities. Respect the child's individuality. Parents and teachers should nurture children with affection, help them in discovering their individual talents and making the most of those talents. Perfection should not be the goal, living life on one's own terms, to the best of one's abilities should. ♦



RAASHMI LAMBA

is a graphic designer who freelances from her bed room-cum-studio in her Mumbai, with books, potted plants and the sea for company. Loves textiles, paper and graphic art. Googles for everything under the sun. Enjoys most DIY stuff. Contact her at raashmi@gmail.com

DYSLEXIC CHILD IN YOUR CLASSROOM? If the answer to most of the questions is in the affirmative, the child might be dyslexic.

Does the child do very well in some subjects and show no aptitude for others?

Does the child have difficulty carrying out three instructions in sequence?

Did the child begin learning to talk clearly a little later than most children of similar age?

Does the child confuse between left and right?

Does the child find reading, spelling or writing particularly difficult?

Does the child often reverse the alphabets in a word, e.g. was for saw?

Does the child read a word then fail to recognize it further down the page?

Does the child often confuse similar looking

letters and numbers, e.g. 15 for 51, 6 for 9, b for d?

Does the child spell a word several in different ways without recalling the correct version?

Does the child answer questions orally but have difficulty in writing the answer?



ALIMENTARY, MY DEAR WATSON

2nd Grade takes on the Digestive System

TEXT: ADITI RAMANATHAN
ILLUSTRATION: AMRUTA PATIL

Science can be and often is fun. It can excite, stimulate and motivate. Amongst the great ironies of our culture is that science, a fundamentally open ended and exploratory activity, is taught so much as a body of facts often resulting in student teacher alienation.

Most students are deprived of an opportunity to savor science, which automatically strengthens the natural instincts of question and exploration. There is, at present, a paradigm shift in the education process, moving from the fact-centered to the person-centered approach, the thrust rightly placed on learning and not merely the accumulation of data (or facts). In my infantile teaching career, my biggest challenge continues to be to grow out of the imbibed rote-based system and reconfigure my teaching strategies.

In my first year of teaching, I was invited to be a guest teacher in a class second graders. The scope was to explain the process of digestion, with as little technical jargon as I could manage. The expression hands-on summarizes the philosophy incorporated in this activity - the students will learn best if they are actively engaged.

I began my class by having the students jump, run around, clap their hands and asking them, "How are you able to do these things?"
"Because I am strong,"
"I have new shoes"
"I know how to somersault"
and then, "We have energy."
"We get energy from the food we eat".
This introduced them to the concept that food gives us energy to do our daily activities.

Following this I distributed Pure Magic Chocolate Cream Biscuits (nothing else would do!) and within the blink of the eye the biscuits were well and truly on their way into the kids' stomachs.

"What is happening to the biscuit? What is helping you eat it", I repeatedly asked them.

I was left to decipher mumbled responses and before long the word 'digestion' came up.

The next activity involved filling a plastic bag with tiny pieces of food and a colored liquid which represented an acid. This is an effective simulation of the stomach. The kids kneaded the plastic bag for 5 minutes, reducing it to mainly liquid.

We poured the contents of the plastic bag into a sock (likened to the small intestine). A tub beneath the sock collected all the liquid, establishing the idea that the food that was broken down passed into the tub (representing the blood carrying the digested food), whereas the undigested food remained in the sock and was passed onto the large intestine to be sent out as....

"Poop!" the students chorused, launching us all into a collective fit of giggles.

Sure. A teacher can limit herself to an overhead projector, a transparency of the digestive tract and a droning monologue about a biscuit's journey through the body. But why settle for this, when you can have so much fun with it?

"You're the teacher who taught us the digestive system" cry several 2nd graders when they pass me by, and quite simply this is the reason I continue doing what I do.



ADITI RAMANATHAN

Spends her time laughing over Calvin's exploits, reading literature and teaching Middle School Science at an IB school. She regrets not having learnt classical dance and would exchange her life only for Hobbes'!



RECOMMENDED READING

TEXT: ARAVINDA A.



WILDERNESS

Author: Roddy Doyle
Date of Publishing: September 2007
Publisher: Scholastic Inc.
ISBN: 81-7655-909-1
Price: Rs. 200
Age: 12+

I think one of the most exciting things brewing in children's literature today is to see writers of fiction (read: Books for adults/ older readers) turning towards children's writing. It's a sure sign that this genre is finally coming of age and writers, publishers and educators are giving it its rightful due. Roddy Doyle (of Paddy Clarke Ha Ha Ha fame and 1993 Booker winner) is one such writer who's steadily bringing out books for young readers. He began with the absolutely enjoyable *The Giggler Treatment* (2000) followed by *Rover Saves Christmas* (2001) and *The Meanwhile Adventures* (2004), and now a novel for teenagers, *Wilderness*.

Wilderness is not irreverent or laugh-out-loud funny in the usual Roddy Doyle style. But it's a book that is flawless and superbly written.

In a Dublin suburb, Frank Griffin lives with his daughter Gráinne, wife Sandra and their two sons Johnny and Tom. Frank's first wife Rosemary (Gráinne's mother) left them many years ago and they have heard that she has since moved to America. Frank married Sandra when Gráinne was six and all was well until Gráinne's teenage years brought troubled times to the fami-

ly. The situation comes to a peak when they receive news that Rosemary is visiting Dublin and wants to meet her daughter.

For a respite from the tensions at home, and to allow Gráinne and Rosemary their time together, Sandra takes her boys on a winter safari to Finland. In the wilderness, in the company of the beautiful huskies, Johnny and Tom come into their own. They are thrilled to be there, the only children on the safari. And in the company of Aki and Kalle, the guides, they make their acquaintance with the huskies. The thrill of the wilderness takes a turn when their mother fails to return with her sled one night. Johnny and Tom decide to go on a rescue mission with the dogs. Meanwhile in Dublin, Rosemary is trying hard to reach out to her daughter but after such a long gap, Gráinne isn't sure she can find her mother in this woman.

Do the children find their mothers' forms the rest of the novel. It's a touching story without an overdose of sentimentality. I especially like the way the boys and the huskies relate to each other and for those who don't understand or acknowledge the interdependence of man and animals, this drives home the point.

Doyle taught English and Geography and it was only after the release of *Paddy Clarke Ha Ha Ha* in 1993 did he give it up to become a fulltime writer. ♦



THE INVENTION OF HUGO CABRET

Author: Brian Selznick
Publisher: Scholastic Press
ISBN: 0 439 81378 6
Price: Rs 953
Age: 9 +

I discovered this book in early 2007 while trawling the web for books. The book was not released yet but the website was up by and Selznick's illustrations were mind-blowing! Like Maurice Sendak, Selznick too displays a versatility in his style and it's always a pleasure to see an artist push the envelope steadily. The concept of this work of art is a skilful blending of illustration and text, combining the idea of filmmaking (Selznick draws inspiration from Georges Méliès the filmmaker from the early 20th century).

Now, the book. It's a beautifully bound hardback and hopefully the sheer volume of pages will discourage a paperback edition. The pages are thick and every page will make you gasp in wonder. The illustrations are as much a part of the story and if you take the advice of the author and read it like a movie, the impact is memorable.

Set in turn of the century Paris, Hugo Cabret is an orphan living in a train station. His obsession is to get the robot that his father had found, to work. All he has to guide him are the notes his father left him. Forced to make ends meet when his uncle disappears, Hugo takes up his uncle's job of being the winder of clocks. He also begins to

nick little things from a toy booth in order to fix this robot. There he comes in contact with an unusual girl and the toy booth owner who's more mysterious than meets the eye and the story picks up pace. The toy booth owner catches Hugo stealing and comes upon the notebook, which makes him really angry. He confiscates it and threatens to destroy the book. Hugo is now desperate to get it back; he is determined to finish what his father started. Selznick ties it all up rather neatly in the end.

It's a well-told story but more than that it is an exciting book to hold and read. The storyline is interesting and at times it may feel as though the charcoal sketches overpower the text. But it's a book I recommend strongly and if you have a few reluctant readers in your class, try this book on them – the sheer volume may look intimidating but once they open the book and see that more than half of it is in pictures, they may actually try and see what it's all about.

Brian Selznick worked at a bookstore while also writing and illustrating his first book, *The Houdini Box*. He is probably best known for his illustrations for Andrew Clements Frindle. Selznick won the Caldecott Honor for *The Dinosaurs of Waterhouse Hawkins* (2001). ◀



GEORGE'S SECRET KEY TO THE UNIVERSE

Author: Lucy & Stephen Hawking
 Publisher: Doubleday
 ISBN: 9780385612708
 Price: Rs 395
 Age: 7 to 9

Everyone knows Stephen Hawking, the author of the bestselling *A Brief History of Time*. I haven't read that one yet but the latest book of his, co-authored with his daughter Lucy, titled *George's Secret Key to*

the Universe was an enjoyable read. The first book for children by Stephen Hawking, it combines the story of a young boy's adventure into outer space with space facts interwoven in it.

George lives with his technophobic parents and his pet pig, Freddy. He is acutely aware of how different his family is from those of his classmates, especially at lunch! One day, thanks to Freddy he ventures into his neighbour's yard (something he has been forbidden to do by his parents) and comes in contact with Annie and her father, Eric, who happens to be a brilliant scientist. Eric introduces George to Cosmos, the computer so powerful that it can draw you a doorway to space. George's days are spent learning more and more things about space. Of course, there comes a twist in the tale with Grepper (Dr G Reeper, George's teacher) who is definitely after something. The adventure begins when Eric is stuck in space with no contact with Cosmos who has been stolen (kidnapped?). George and Annie have to save Eric but first they have to find Cosmos.

Throughout the story are interwoven passages on the black holes, planets, illustrations and scientific drawings that answer any questions the reader may have. I skipped some of them but it was good to know that the facts were there if I wanted to know more. I also liked how there was a reasonable argument between those who are pro technology and those against. It offers scope for further discussion if you are recommending this book for your class.

On the whole, it is an interesting concept and probably the direction in which many children's books are headed – combin-

ing information within an interesting story. From histories, to science, mythology and now space, stories seem to be the chosen medium. And *George's Secret Key...* is a commendable effort and good for a "romp through space".

If you liked the book, watch out for the second book in the series, due for release in September 2008. ◀

THE GOOD READING GUIDE

- PERCY JACKSON AND THE TITAN'S CURSE by Rick Riordan, ages 12+
- HARRY POTTER AND THE DEATHLY HALLOWS by JK Rowling, ages 12+
- BOYHOOD DAYS by Rabindranath Tagore, ages 12+
- DOUBLE TAKE: RIVALS FOR THE CROWN by Margaret Simpson, ages 12+
- WILDERNESS by Roddy Doyle, ages 12+
- PHYSIK by Angie Sage, ages 9+
- THE INVENTION OF HUGO CABRET by Brian Selznick, ages 9+
- THE STONE AGE NEWS by Fiona Caulfield, ages 9 to 12
- KALPANA CHAWLA, ACK, ages 7+
- GEORGE'S SECRET KEY TO THE UNIVERSE by Lucy and Stephen Hawking, ages 7 to 9
- PICTURE GANDHI by Sandhya Rao
- ZAC'S PB by Michael Stamford, ages 7+
- BUG BOOKS (Heinemann), ages 7 to 9
- UP THE GARDEN PATH series by Judy Allen and Tudor Humphries, ages 5 to 7
- FLOTSAM by David Weisner, ages 5 to 7
- THE BLACK LAGOON series by Mike Thaler, ages 5 to 7
- THE PAPERBOY by Dav Pilkey, ages 5 to 7
- THAT'S HOW I SEE THINGS by Sirish Rao and Bhaju Shyam, ages 5 to 7
- MY MOTHER'S SARI by Sandhya Rao and Nina Sabnani, ages 3 to 5
- PHILIP ARDAGH'S BOOK OF ABSOLUTELY USELESS LISTS, for teachers

ARAVINDA A. joined Hippocampus because she wanted to be around books and the kind people here allowed her to do so. Likes writing and has tried to earn a living from it. Loves the company of dogs. She agrees with the anon Zen master who said, "I never got lost because I don't know where I'm going."



NEWSBYTES

EDUCATION REMAINS THE 'MOST FAVOURED SECTOR'

NEW DELHI

Prime minister Dr. Manmohan Singh has said that his Government has given much importance to the Education sector. He described education as the "most favoured sector" for the UPA Government. Speaking at the National Development Council (NDC) meeting, Dr. Singh reported that there is a hike of Central Gross Budgetary Support from 7.68 percent in the 10th Plan to over 19 percent in the 11th Plan.

The PM said that the country needed a greatly expanded supply of educated and skilled labour to support ambitious growth targets. This will be possible only through inclusiveness in the education sector and by spreading development to backward regions and marginalized groups.

Attempts are being made to carry out massive transformation in the area of education through several new schemes and projects. A new scheme for universalizing secondary education has also been proposed apart from the ongoing Sarva Shiksha Abhiyan (SSA), he said.

ANCIENT LANGUAGE, NEW TEACHING TOOLS

BANGALORE:

Interested in learning Sanskrit but don't have the time to go to a class? Technology is at hand to help you.

Winnova World, which promotes educational consultancy, software, personality development and corporate training, will launch Prajna Vani, an online course in Sanskrit developed by M.K. Sridhar, Sanskrit lecturer, National College, Basavangudi. Addressing presspersons, Prof. Sridhar said the audiovisual course is the first of its kind.

It is for the first time being offered in the audiovisual interactive medium through the Internet. The course offers 30 lessons, each covering 45 contact hours, and will be offered to the public in the first week of January. Rekha Janardhan, director, operations, said that a CD containing introduction to the Prajna Vani course would be released here on December 22.

FOREIGN STUDENTS FLOCK TO DELHI FOR SCHOOL EDUCATION

NEW DELHI:

The capital is now increasingly a favourite with foreign students who are flocking to the city's schools, say experts. "Every year as many as 200 students of foreign origin come to Delhi and surrounding areas to pursue school education," says former director of International school of media & International studies (ISOMES) Nalin S Kohli.

The capital receives students mainly from South Korea, Thailand, Nepal and Canada, said Nalin, adding that good

English education, security, cultural integrity, the city's cosmopolitan culture and bilateral relations with neighbouring countries are the main reasons behind their move.

"Public schools in our country are not so good. Also, we can't learn good English there. That is the reason why I chose to fly Delhi," said Jaemocho, who has come from Seoul, South Korea, studying at the International General Certificate of Secondary Education (IGCSE) I at Vidya Sanskar international school.

LIFETIME READERS OR SCHOOL READERS?

We teach our children to read but have forgotten to teach them to want to read. What some schools are creating are 'school readers'. This means the child reads sufficiently well to pass an exam and understand their text book but does not enjoy reading for pleasure.

A 'school reader' is a child who has never been exposed to proper reading and has purely academic knowledge of text. They rely on direct comprehension and possess no inference skills or understanding of what lies beneath the writing.

Reading aloud to children is the first step in creating lifetime readers, who love reading. Reading Aloud once a day combined with short sessions of Silent Reading works wonders! ♦

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WHO DARES CHANGE A CURRICULUM?



IF THE WORLD CONTINUES TO CHANGE AS RAPIDLY AS IT HAS IN THE PAST CENTURY, WHAT YOU HAVE LEARNT WILL BECOME LESS AND LESS USEFUL IN LESS AND LESS TIME. WHAT WILL REMAIN MORE USEFUL IS THE ABILITY TO LEARN. ASHISH RAJPAL, M.D. OF IDISCOVERI EDUCATION, EXPLORES THE MATTER IN THE SECOND OF THIS TWO-PART SERIES.

"You are afraid of what you don't know" - J Krishnamurthy

Courage is the most underestimated by-product of a true education. It is built by failing, often repeatedly; figuring things out oneself, taking on circumstances with the confidence that persistence will yield a solution. For this to happen, learners must be actively involved, the subject must be relevant to the learner's life. In a traditional classroom 'teaching' is indistinguishable from 'telling'. Learners are told the right answer, and expected to recall it at another time; learning is passive and involves extensive listening (to the teacher), memorizing, recall. An unfortunate outcome of these is they reduce the act of learning to a chore that one embraces out of compulsion.

The past century saw several models emerge across continents, all of which sought to challenge 'follower-ship' in learning. In North America, Kurt Hahn started the outdoor education movement based on the idea of experiential learning and character-building through adventure. In Europe, Steiner and Montessori sought to create more sensory education systems that were child-centered and emphasized creative expression. Gandhi wrote extensively on a new education (*Nai-Talim*) that built vocational skills, enabled economic independence, and encouraged dignity of labour. These experiments in education, sought to build independence of mind through active learning experiences.

WHAT DOES ACTIVE LEARNING LOOK LIKE?

Imagine learning about geometry by playing with stick models of different shapes, and figuring out that triangles are extremely stable, while other shapes are not; then going on to see the application of this concept in real life by using triangles for constructing various structures, and observing their use in bridges, towers and other constructions all around us. Similarly, imagine experimenting with batteries and bulbs in different arrangements to figure out when a bulb lights up most brightly, or when a battery runs out the fastest. Learning about simple machines by observing machines all around us, and inventing our own could be so much more exciting, and useful, than reading about them from a book.

If it sounds so exciting, why don't we see a widespread prevalence of this kind of learning? The simple answer is, because it's hard to do. Research suggests that teachers using active learning methods may spend up to three times more time preparing lessons, in their first year of teaching. Designing engaging experiences that meet learning objectives while catering to individual needs, is hard. Executing them in class, consistently, is even harder. Environments where students are free to question openly can be seen as challenging the teacher's authority. Discipline and structure cocoon ignorance more effectively!

SO, WHAT IS THE WAY OUT?

Trashing teachers helps no one. Policy might help, but won't alter things. Revised textbooks seldom affect the quality of classroom transaction. Technology often lies unused. Teacher training alone has short-lived benefits. What works, we realise now, is a better mouse-trap. Specificity works. Demonstration works. Measurement works. A research based "what to" curriculum backed with "how to" training works. A great, last mile solution that teachers can actually use in class, which tells them how to teach each concept, to each child. Something that specifies the most compelling ways to approach photosynthesis, essay writing, geometry or what have you. Something that specifies what assessment, what activities, what text, what resources, what exceptions - gives them the complete tools *and* the training and coaching in using them. So that they become experts over time.

For active learning to spread, the theoretical world of 'curriculum' academics must meet the real world of 'teaching' practitioners. Currently, the two lie estranged pretty much the world over. There is no time for motive-led politics, mindless bureaucracy and second-rate intellectualism. Citizens directly responsible for children - parents and school leaders - must act and find solutions for themselves. If, indeed, our children are to be creative, characterful leaders who can address the challenges of this century, looking at the process by which they came to understand the world around them may make all the difference. ♦



NOT JUST ANOTHER BRICK IN THE WALL !

Each child is unique and has an inherent curiosity and desire to learn. The quality of our education system must be measured by how it stokes the fire of learning, so that each child can maximize her potential.

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